

GREAT LAKES TECHNOCRAT

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Illustrating the Futility of Price System Methods of Operation; Interpreting the Trend of Events from the Social Aspects of Science; and Presenting the Specifications for Total Mobilization for Peace!

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'Big Town'

The Arsenal Of What Democracy?

By Harry Smith, 8342-1

A blight has hit the heart of America's great cities. There is no point in kidding ourselves any longer, it is there and it is spreading. Still worse, scientific diagnosis shows that the disease is malignant. We may as well admit that too. Political quacks in the city hall will continue to finger their beards, hem and haw and pass political prescriptions. In desperation they will consult with economic quacks in Washington who will finance the cost of palliatives, but politico-economic ministrations will merely prolong the final agony. 'Big Town' is doomed. Not many will mourn its passing. Except for a favored few who preempted its choice quarters 'Big Town' never was a decent place in which to live. It has become a hellish menace to the welfare of all. If enough of its functional population survives the city's disintegration and if its industrial equipment is not destroyed, the city of today will be replaced by something entirely new, a functionally designed and operated structure—an urbanate. Urbanates will eventually absorb all of the Continent's non-agricultural population.

Crossroads of Commerce

CITIES EXIST for two purposes:

Industry and Business. Industry is the technical means of producing physical wealth (goods and services). Business is the exploitation of Industry for a profit. Up until the time of the invention of the steam engine in the latter part of the 18th Century, physical wealth was produced by muscular energy, hand tools and a few primitive wind and water wheels. The cities of antiquity and the Middle Ages were built and operated largely by human toil and hand tools. They were limited in size by the amount of fuel, raw materials, food and finished products that could be transported on the backs of animals, in carts and in sailing vessels. It is doubtful if a city of one million inhabitants ever existed previous to the year 1880. Big Town is a steam city.

Business, the means of exchanging man-hours of labor for industrial products and of trading one product for another, evolved from a status of primitive barter to a complicated sys-

tem of exchanges based on commodity evaluation employing debt claims (money) as a medium of exchange. We shall call this system a Price System irrespective of whether ownership in the system is held by individuals or collectively. Its basic manipulations were known and the rules of the game had been formulated by economists, legalized by political government and sanctified by the church by the time America became a Nation. Fundamentally the Price System has not changed. It was born of human toil, hand tool scarcity, and still depends for its success on two conditions, i.e., scarcity values and the flow of money through wages and salaries paid for man-hours of labor. Abundance, actual and potential, now threatens all values in North America, and man-hours of purchasing power is a declining quantity. The system is fast becoming inoperable. This is observable in the decay of cities. Big Town is a Price System town.

Industry, on the other hand, has undergone bewildering changes since 1800. Process has displaced handicraft, line production has displaced

batch production and automatic controls are fast displacing manual controls. A vast mechanical complex powered with extraneous energy (gas, coal, oil and hydro power) has been created here in America, and it is lodged in our cities.

America's troubles result from a conflict between these modern physical realities and antiquated philosophical concepts, legal prescriptions, property rights, debt, interest, taxes, value and price. Big Town and its population is becoming a major casualty in this conflict.

A word about politics: Political government is merely an adjunct of business. The purpose of political government is to control people in a way favorable to business. If in the pursuit of profit a small amount of social welfare accrues, it is only an accident. Political government holds the cow while Business milks her. She's drying up. Big Town is a political town.

'Wonderful City of Oz'

The modern American metropolis is a monstrosity produced by attempting to install and operate 20th Century mechanisms in a 19th Century layout. Every attempt to change the layout so that it may conform more closely to the pattern demanded by high energy, technological operations runs smack into Price System barriers.

Suppose the widening of a street is proposed, immediately the System sets up its interference. How much profit can be made out of the project? Who will get it? Which influential individuals and corporations must be favored? What will be the political implications? Will the taxpayers stand the 'rap'? Does the law require that the proposal shall be put on the ballot so that the citizens may decide on the basis of opinions a question which should be decided on the basis of

facts? The answers to these questions will determine whether or not the project is to be undertaken.

Suppose enough politico-economic agreements can be arrived at; suppose the project is okeyed! From then on to completion, the engineer's design and the construction will be sabotaged by politicians, lawyers, bankers, real estate promoters, property owners, suppliers of materials and labor union leaders. When completed, the project will be only a piece-meal improvement, unrelated to any scientific overall operational design.

How does a city get its spending money? Taxation, of course! The money available for city government administration, maintenance, public service, education and changes in a city's layout is limited by the amount of taxes which can be collected. For 15 years the valuation of taxable real estate has been declining steadily. In Detroit, in 1930 it totaled \$3,750,000,000. In 1945 the total was \$2,250,000,000, a drop of 40 percent.

When assessed valuation declines, there's only one thing to do; that is, increase the tax rate. The tax rate per \$1,000 has steadily increased in Detroit from \$20.15 in 1930 to \$29.42 in 1945, a rise of 46 percent, or an average increase of 61 cents per thousand valuation a year. Buildings on which the income was not sufficient to meet the high tax rates have been torn down. Big Town is pock-marked with open spaces now occupied by parked cars, hot dog stands and 'pitchmen' where once stood buildings of high taxable value. This practice forces the tax rate higher. Then, more buildings, unable to meet the higher rate, are torn down, still further increasing the tax rate. A downward spiral has been started which can end only in complete city bankruptcy.

Let's take a look at one of our 'Big Towns'! The *Detroit News* recently published a series of articles by James Sweinhart on Detroit's widespread and rapidly extending structural decay. Credit is due the *News* for much of the statistical data which follows.

Monument to Free Enterprise

When Detroit was incorporated in 1806, its area was one-third of a square mile. By 1916, a period of 110 years, it had expanded to only 47 square miles. But, during the next ten years it annexed 92 square miles, more than twice the growth made in 110 years, reaching its present area of 138 square miles. What caused this mushroom growth? The 'horseless carriage' which for 15 years had been slowly growing out of the cobbling stage popped overnight and out came the automobile industry, a shiny steel monster, using line production, machine tools and extraneous energy. It squatted down in Detroit's broad, elm-shaded avenues and started to expand, make money, and stink. Detroit never recovered from the shock.

Between 1930 and 1940, about 70,000 families with incomes sufficient to finance the purchase of suburban homes and motor car transportation moved out of Detroit, leaving residential and business property to those unable to escape. It's easier to run away from a problem than it is to solve it.

A slum is a loathsome place where people live who cannot afford anything better. More than 20 percent of Detroit's residential and small business area has sunk to the status of a slum. Five percent more is already blighted. The blight is spreading. Fear of movements of hated racial groups is jeopardizing values in other

sections. In all, about 30 percent of the city's area is affected.

The monster belches clouds of soot, ash grit and other disagreeable refuse, which precipitate on the city at an annual rate varying from 52 tons to 128 tons per square mile depending upon the degree of prosperity and enforcement of the anti-soot ordinance. Property damage has been estimated at \$20,000,000 per year. A sooty pall hangs over the city at all times, robbing the residents of the health-giving properties of the sun's rays. Between October and June, water vapor holds the soot from chimneys in suspension, filling the air with a gray, slimy mixture that pollutes everything it touches. One's only escape is to sell his city residence and move to the suburbs. Mechanisms for smoke and soot elimination were invented long ago and Detroit has had pollution control laws since 1925, but they have not been enforced. Although elimination of this pestilence would be highly profitable in dollars and cents, business and politics have been too dumb to see the profit.

Detroit's 138 square miles of area represent an expansion over and above the physical requirements of manufacturing, accounting and residential platting of at least 500 percent. This is what happened. The city fathers, overcome by the venal exuberance of real estate boomers, platted about five times more territory than was necessary. Detroit, in common with nearly all other cities, over-estimated its probable future growth. Long-term technological and population trends have made their estimates look silly. As a result of this error, Detroit at present has 318,794 buildings and 469,486 lots; and 150,206 of the lots are vacant. The city has 630 miles of business frontage, the greater part has been serviced with sidewalks, pave-

ments, sewers and water mains. Now note this, only 108 miles of the 630 miles of business frontage has been built up, and 522 miles are vacant. On the accredited basis of $3\frac{1}{2}$ miles of residences to one mile of business establishments, Detroit would have to have a population of 15,000,000 to fill up its vacant business frontage.

'Heaven Will Protect The Working Girl'

To finance the real estate boom the city went into hock up to its legal bonding limit, and is now paying off its indebtedness under refinancing agreements at the rate of \$17,000,000 per year. Consequently, it has little money for anything beyond barest subsistence maintenance. A recent news item, headlined 'Mental Cases Called Peril,' states that the Probate Court committed 650 mental cases in the last six months of 1945. The rate of present commitments is higher. But there is no place to put those committed. Receiving Hospital contains 281 mental patients in space for 126. Probate Court waiting lists of mental patients contain hundreds of names. Where can they go? There is no room anywhere, and meanwhile they are a menace to their families and the whole community.

About 200,000 war workers came to Detroit during the war boom. The city had plenty of space, but no adequate housing. How many persons have been left stranded here without employment cannot be estimated, but we do know that the slums are jammed with them. In thousands of instances, one or two rooms, with inadequate or no toilet facilities, house two or three families. Hundreds of families of five members, papa, mama and children, live, cook, eat, sleep and sponge their bodies in a single room. Twenty

percent of Detroit's population, one family in five, are compelled to live in stinking, dirty, rat-infested, crime and disease-breeding, congested areas.

Comparison of Police data for 1940 taken within Detroit's principal slum area, that bounded by Grand Boulevard, with data taken outside this area, reveals shocking inroads of crime and disease, which no responsible person can long continue to ignore. Juvenile delinquency is 377 percent greater inside the slum area. Persons charged and prosecuted are 300 percent greater. The figures on health data for 1941 show that deaths per 1000 are 153 percent greater inside the slum area; from pneumonia 131 percent greater and infant mortality 48 percent greater.

The slums in the heart of Detroit are not the only ones in this area. New slums have sprung up in the suburbs of Detroit, in Macomb and Oakland counties, all over South Western Wayne County, around Ypsilanti, Ann Arbor and other districts, wherever population groups are stranded.

A recent article in the *Detroit Free Press* contains this statement: 'Michigan's fifteen-mill cities are wearing out.' (15 mill tax limitation is the Michigan law.) 'They are headed for the junk-pile and boneyard unless they get more money to keep going.' The cities mentioned were Battle Creek, Jackson, Flint and Grand Rapids. 'They have practically no money for postwar improvements or development. They have cut down on essential services and worst of all, they haven't enough money coming in to pay for adequate maintenance of their municipal plants at the present level.' The populations of these cities varies from 43,453 to 164,292. So Little Town, as well as Big Town, is diseased.

'From Watt to What?'

We have noted the technological changes which have taken place since the year 1800 and especially during the past twenty-five years. Extraneous Energy built Big Town. Extraneous Energy under Price System controls is the cause of its decay. Modern, high-speed, straight-line, continuous process replaces the old batch process. For the same unit output it occupies less floor space. This means more and greater city deficits.

This is also true of business equipment. Compare the amount of floor space occupied by the old-fashioned ink-slinging office clerks with present day high-speed, semi-automatic accounting equipment. Now that the period of industrial expansion under Price System dominance is virtually over, it follows that in the future, due to more widespread use of such equipment, the required floor space will decline together with human employment. If Big Town's skyscraping office buildings are still occupied, it is because an equal or greater amount of floorspace in other buildings has been vacated.

These statements on the relation of the decline of assessable real estate values to the input of extraneous energy are not opinions. They are observations based on statistical data. Kilowatt-hour statistics for the Detroit area during the 15-year period 1930-1945 show an increase of over 100 percent. Property valuation declined 40 percent for the same period.

Why can't the city fathers persuade financial institutions, such as the big Life Insurance Companies, to invest in large scale, low rental housing projects as long-term investments? The answer, slum housing units packed with tenants from basement to attic really pay high rent dividends

on the relatively small ownership investment. Consequently, if the City has to pay what the **property** earns, instead of its real worth, the cost of condemnation would be so high that new capital could not raze, clean and build new housing units at a cost low enough to assure sufficient profit at low rentals. Life insurance companies are getting out of the real estate business and are investing their liquid funds in U. S. securities. The record shows that the percentage of U. S. bond holdings to total life insurance investments has risen since 1915 from .005 percent to 60 percent. Total investment in real estate has dropped to the lowest level since 1930. Mortgage holdings have dropped to 15 percent of their total assets.

Cities Are Continental Problems

It is not our purpose here to emphasize the suffering and degradation of slum dwellers. We know that the moral approach to social problems is futile. Pauperizing and degrading humanity is a prerequisite of the Price System. The point is not how immoral are the defenders of the System but how dumb. How dumb to think they can escape the consequences of the System's collapse. Not the consequences of a calloused conscience, but the consequences of physical realities, plagues, crime, uncontrollable fires, mob violence, and chaos.

The economic stability of the nation depends upon the economic status of counties and cities. This stability is fast being undermined. Of far greater importance is the technological stability of the Continent. Cities are centers of vast, highly complicated, closely integrated, highly tenuous technological installations. The lives of 70 percent of the Continent's population depend upon smooth continuous operation. It is a technological,

not a moral problem. If a telephone is in working order, the pure and the corrupted can dial and get their numbers with equal facility. If connections are broken, no amount of moralizing will mend them. Send out a trained maintenance man, be he saint or sinner, and service will be restored.

The factors involved in Big Town's decay do not exist separately, each distinct from the other. They are closely interrelated parts of the city's industrial and social complex. Transportation, water supply, sanitation, smoke and soot pollution, housing, rat infestation, public health, education, recreation etc., are all tangled up with each other. Each is incapable of individual solution.

Clearly, then, the solution lies in an overall design of social operations. Since the city's technological complex is tied-in with Continental operations, closely integrated with agriculture, mining, oil production, forestry, fishing, transportation, hydrology, etc., the design must be Continental in scope. When designed operation is mentioned, we are conditioned to think of politico-economic planned economy which has been much discussed the past fifteen years. We are referring here to something entirely different. Economics is a philosophy, not a science. Economic theories are founded on concepts which have no physical reality and exist only in the minds of men. Consequently they have no exact terminology, are variable and are not subject to measurement. Politics is the art of balancing opinions. When you mix politics and economics into planning, you get an alphabetical nightmare which no human genius can make head or tails out of. Planned economy and designed operation of physical equipment along engineering lines are directly opposite to each other.

Since the problems of city design, construction, operation and maintenance are technological problems, subject to strict observance of physical laws, and the exactitudes of measurement, a scientific solution becomes mandatory. Free the engineer from politico-economic interference and put him to work. Engineering methods have given us the best of what we have today. Only engineering methods can provide for tomorrow.

Technocracy did not start with a moral idea or a preconceived plan. Technocracy started by conducting an investigation. For twenty years Technocracy has been collecting data on the physical factors that are dictating social change on the North American Continent. This data has been correlated and the long term trends charted. Out of this factual data grows Technocracy's scientific analysis and out of its analysis grows its social synthesis. Technocracy stands ready with the basic design for a non-price, non-business, non-political, functional operation of North America.

No More Dog Houses or Slums

America's present big cities owe their existence chiefly to the fact that they have become centers of trade, commerce, bookkeeping, advertising and selling. Wiping out these non-functional Price System activities will turn the greater part of Big Town into junk. Many industries now located in cities will be moved nearer to raw material sources and to points more advantageous to the distribution of finished products. This will necessitate a re-allocation of population. Size and location of the new type of city, the Urbanate, will be determined entirely by the requirements of functional operation of the entire Continental system of production and dis-

tribution of abundance on a balanced load basis. New York City probably will become one of the richest metal mines in the world.

Population in urbanates will be housed in a relatively small number of large size, commodious family residential units, instead of in a large number of small, single family dwellings of today. From an efficiency standpoint, this type of building offers tremendous advantages over smaller units. The energy cost of construction, servicing and maintaining one apartment, for say 1,000 families, is many times lower than the energy cost of 1,000 separate houses each with its separate heating, air-conditioning and cooling systems, water systems, refrigerators, etc. If the entire population of the Continent is to be housed with a minimum of energy cost and a maximum of utility, this type of dwelling is the only answer.

Urbanate housing units will bear little resemblance to present day Price System apartments. They will be commodious, soundproof, vermin proof and dust proof. Each family unit will have its own private entrance and its own private garden or patio and each will share the beautifully laid out park and recreation grounds surrounding the entire apartment building. Each of these may be provided with a gymnasium, library, theatre, nursery with trained child care attendants, cardroom, dance hall, swimming pool, bowling alley, wood-working shops, machine shops and laboratories for the convenience of those who need them in the pursuit of hobbies.

Each building will have its centralized cleaning service, garage, infirmary, kitchen, laundry and other centralized services. Utilities, heat, light, water, sewage and garbage disposal, power, communication, etc., will be

included in the design and all conduits made readily accessible.

A tube conveyor or transportation system, similar to that used in department stores but powered with solenoid magnets instead of compressed air, may be installed. They will be automatically controlled by a device similar to the telephone dial, which will send the tube container to any house or shop in the urbanate, thus facilitating the delivery of mail, telegrams, milk, groceries, etc., and removing the annoyance of delivery men and trucks. For those who insist on single family dwellings, each urbanate will also contain a relatively small number of individual houses.

The Prime Function Is Living

Technocracy has also laid down the design for rural communities, the Agrotechnology Unit. Here the special function of producing and processing agricultural products has dictated the design.

With the departure of Price System interference and the arrival of functional administration, billions of man-hours now employed will be eliminated. Then, too, many persons now engaged in accounting and selling will be available for functional positions. This means less work and more workers, necessitating shorter working periods, longer vacations, and an early retirement age. Work periods of 4 hours a day, 4 days a week, 78 successive days of vacation and a retirement age of 45 are possible. To accommodate vacationists and the retired population resort centers in Mexico, West Indies, California, Florida and at other desirable points in the South and North will be built. Climate and function will dictate the design of these population centers.

Warren S. Thompson in his book 'Population Problems' makes this statement:

It appears to be high time to consider cities as places in which people are to live rather than merely places in which to make goods to sell for money to enable us to make more goods to sell for more money and so on ad infinitum . . . a city civilization in which the deaths exceed the births—a condition which has already come to pass in many quarters of our large cities—cannot long endure and can be regarded only with misgiving by those who look some distance into the future. A civilization whose most perfect fruit is the modern large city is certainly doomed to early decay.

Much hysterical speculation is rife on the future of cities in view of the hazards of modern warfare. It has even been recommended that whole populations go underground in spite of the fact that biologically man is an air animal. He came up out of the

sea, wallowed in the mud, and now climbs steps into his house. If the best that Price System civilization can do is to bring man to a point where he must go underground to escape his own weapons of destruction, then that civilization must be cockeyed. It would seem that man's only chance of survival is to abandon the cockeyed Price System for a scientific civilization.

Technocracy proposes a design for living on the North American Continent which is in conformity not with conditions and traditions of European and Asiatic countries of the past, but with the physical factors existing in America today. The materials, the technology, the trained personnel and the design are at hand. The only obstacle is a frame of mind, a philosophical hangover from 7,000 years of scarcity conditioning; twilight thinking in a fluorescent age.

It is time, past time, for the American population to change its mind. *Investigate Technocracy!* Then join this mass movement of North Americans. It is the only thing that can solve the problems of 'Big Town, Little Town and Everyman.'

Why Not Export The Poles Too?

'In order to cope with the acute housing shortage in Shanghai, the authorities concerned have placed orders with American and Canadian firms for 10,000 prefabricated houses. More of these homes will be added as the need arises. Some of them have already arrived in Shanghai and will be set up very shortly.' (*Chinese News Service*, April 26, 1946.)

Some years ago a small town newspaper waged a vigorous campaign against the town council. One of its stories was headed: 'Half The Town Council Dishonest.'

The outraged members of the council protested, demanding a retraction. The editor agreed. Next day the gazette carried this headline: 'Half The Town Council Not Dishonest.' (Sgt. Daniel Shreiber in *Reader's Scope*, January 1946.)

'It is assumed as a matter of course that a professional politician will do anything, say anything or endure anything for votes, and that assumption is seldom controverted by plausible evidence.'—Henry L. Mencken, as quoted by the *American Freeman*, April 1946.

13 Is a Lucky Number

We Can Have Slavery!

By Robert O. Black, 12237-1

Did the War Lords of Japan really analyze the United States before their attack? Would the average citizen hit Jack Dempsey? The two questions are parallel. Japan, a nation of less than one hundred million, and poorly mechanized, attacked a nation of one hundred and forty million, which, in addition to its human population, had over thirteen billion mechanical slaves, as efficient as human beings in creating the materials of war. That's where Japan made her major mistake.

The Invisible Army

FIGURE it out for yourself. Right here in these United States (1946), we have a population of 140,000,000 and we have energy not produced by human toil, extraneous energy, of more than a billion kilowatt-hours. This is approximately the energy which thirteen billion humans could produce. A kilowatt-hour is equal to the labor power of 13 men. So, even leaving out atomic energy we are producing enough extraneous energy to supply every man, woman and child in the nation with the labor power of about 100 slaves.

What's your chance for the nobility of toil and sweat with such a set-up? Just what chance have you to compete with this fountain of production? Remember, the surface only has been scratched. More slaves are just around the corner, advancing day by day to crowd us into the background of production. The Columbia River alone, when completely harnessed, can furnish an additional billion electric slaves. The Missouri and St. Lawrence rivers will also be harnessed. There are many other river and power projects too numerous to mention, in the offing. Each and every development

means more production with less human toil, through extraneous energy.

Let us dip into the not too distant future when we will face either chaos and ruin, or the abundance which these slaves make possible now. We do not get this abundance now simply because we, the one hundred and forty million of us, do not control these slaves of ours. The control still exists in the hands of the few, and is used for the betterment of the few, not for the multitude.

We are all Aladdins in our own right. We can go Aladdin one better; we do not even have to rub a lamp. There's just a button to push, or a switch to throw, and a hundred Genii are at our beck and call.

From time immemorial we have been indoctrinated with the idea that 'by the sweat of our brows' we shall earn our bread. It is no longer possible. What chance has the frail flesh and blood human to sell his services, when he bids against a hundred mechanical slaves? They don't get tired, don't get sick, don't eat, don't wear clothing, don't require housing or any of the other necessities that human flesh is heir to. They don't vote. They will work regardless of the Deal—New, Old or Raw. Bigger, better

and faster slaves replace them when they become outmoded. Any one who pump primes his ego with the idea that he can compete with an army such as this is only spitting against the rising wind.

You Can't Work Here Anymore

There are not many jobs left for the one hundred and forty million of us now. But, who wants to work anyhow? Who wants to work when there are so many more agreeable things to do? Do? What will we do, asks Mr. and Mrs. America. Why, we've always worked, or tried to. There is an answer. These slaves of which we write do not think or plan. There will be more of that to do in the future. Probably you've been so busy chiseling your fellow man out of enough on which to exist that you didn't have time to think.

Oh, yes, there are things to be done. There always will be. But, the main job is control and direction of these slaves who are always ready to do your bidding. There's a function for all of us. Thank the powers that be that these slaves cannot be teachers, writers, artists, singers, surgeons, doctors, dentists, scientists, technicians, etc. That's where you and I come in. We can let the slaves take care of the drudgery.

Control them, and abundance, leisure and security is the result. Perhaps two percent of the work will be left for muscles to do, while the slaves will do ninety-eight percent. We will use our heads instead of our muscles. We will have worked less and accomplished more. The net result will be better food, clothing, housing, better this and better that. The entire set-up will be so much better from dawn 'til dark and from dark 'til dawn that it will not be recognizable

as part of the present scheme of life. It will be quite different from today and the days gone by, when 'Freedom of Enterprise?' held full sway. Those were 'the good old days' of freedom to toil when you *had* a job, freedom to indulge in worry and anxiety when you didn't have one, and freedom to scabble along in scarcity and insecurity all the time.

As the slaves come more completely under the control of all and are used for all, there will be more time for play, for the enjoyment of the bounties of this Continent of ours. There will be more time which is the individual's own than ever before, to be used as his fancy dictates. He can hunt, fish, swim, travel, climb the mountains, or do as he pleases with the time which the slaves have made possible. Life will be a fuller life, a more productive and a more livable one. It's all yours, Mr. and Mrs. America, but, to gain it, you must establish a control for the slaves. Even now, they are waiting to do your bidding.

We fought a war some eighty years ago and incidental to it was the abolishment of human slavery. In the short span of years since then, we have accumulated mechanical slaves, who number about seven times the population of the whole earth. So long as our Continent yields its treasures of coal, oil and gas, so long as the rains come down from the heavens, we will enslave more and more. No moral issue is involved, but these hosts of slaves create a social issue. *That issue is control.*

Freedom Is As Freedom Does

All of America has been a spectator to the futility of political control. Palliatives have been heaped on palliatives without end. We have wit-

nessed the destruction of abundance, the workings of the PWA and WPA, the pump-priming during peace, and its continuance through war. We have seen the ineffectiveness of it all when directed against the avalanche which science and technology has brought to our midst. Today, the politicians all over the country are more befuddled than they were in the 1930's. Social control today is in the hands of a few, who assume it belongs to them by some divine right and inheritance. They have gained it as they could. They have chiseled their fellow men and gutted a Continent of its choicest natural resources.

Just as surely as Hitler and his Nazis brought ruin and destruction to Europe, these directors of an out-moded, decadent and dying economic system will drag to chaos and ruin that glory that still remains of America, themselves along with it, if not prevented. We stand at the threshold of a new way of life, the life of Science. No man-made laws can long delay its coming. The extraneous energy slaves are here, billions of them. Each advance in science, every new dam, every newer and better machine hastens the death of an already dying system.

Listen to your radio; read your newspaper. Not an hour in the day goes by but what you will here an appeal, more properly propaganda, for us all to get behind and push, to hold

up this system which cannot stand on its own legs.

The propaganda of the Price System says: 'Look at America, the richest nation on the face of the globe, the highest standard of living, the most this and the most that. Whoopee! Look what my system did!'

And, whisper it, 'is going to do.'

Let's analyze and rationalize a bit. This is not the only spot on earth, where 'Free Enterprise' has held sway throughout the centuries. In varying degrees it encircles the globe. Yet it points with pride to what it has done for America. We are where we are and what we are because of the wealth of our forests and mines, the original fertility of our soil, the power of our rivers, our coal, our oil and the thousand and one other bounties of this Continent which were here to be exploited by Free Enterprise. We are *what we are not because of Free Enterprise but in spite of it.*

Mr. and Mrs. America, you are heirs to the greatest bounty and fullness of life that was ever to be had for the asking. It is yours, rightfully yours. It belongs to the multitude. There is a way to get it, without riot or revolution, but peacefully. It's the American Way — ALL FOR ONE AND ONE FOR ALL.

Why not *Investigate Technocracy Now?* But, don't stop there. Join and do your part to bring about the New America.

Up and Atom

It has been the use of energy in its various forms—mechanical, chemical, hydraulic, thermal and electrical—which has raised mankind from primitive levels to the high standard of living we already enjoy. Now we see before us a new,

marvelously concentrated form of energy with which we may climb to heights we can only dimly foresee.' (Dr. C. G. Suits, vice-president of General Electric, and director of its research laboratory, as quoted in *Science Digest*, April, 1946.)

A Man's Home Is Whose Castle?

A Dialogue About Playing House

By A. E. Borel, MAL

Mother, May I go out to swim?

Yes, my darling daughter.

Hang your clothes on a hickory limb

But don't go near the water.

Jack: 'Hello, Bill, how is everything going today?'

Bill: 'Oh, fine, Jack. But you know, I've been thinking over that line you were giving me about Total Conscription and so on. It looks to me that you are taking away people's rights in the private ownership of property. You know, if people can't have their own private property, can't own their own homes or cars, why, they just won't have any incentive to work.'

Jack: 'Yes, I admit it, Bill, this idea of owning things, of having your own home, your own car and so on, certainly has a big appeal to it, doesn't it? People are so used to the idea of owning things, I guess it would be pretty hard for them to change their ideas. There are some funny angles about this idea of owning things. You know, Bill, I don't know if you own your own home or not, but the question just occurred to me. I don't want to be personal about the matter, but would you mind telling me, frankly, whether you own your own home or not?'

Bill: 'Well, Jack,' kind of fidgeting around, 'I—I suppose I do own my home, but—ah-ah.'

Jack: 'Never mind, never mind, Bill, let's let it go at that. The point

I want to make isn't whether you own your own home or not, it is merely a question I would like to have every American ask himself, "Do I really own my home?" I just sprung it on you that way to get you thinking.'

Bill: 'I see what you mean, Jack, so I guess I can say, yes, I own my own home.'

Jack: 'O.K., Bill, but please pardon my insistence. For the sake of our argument, I want to repeat that question. I want to stress it just a wee bit stronger, this way—DO you REALLY own your own home?'

Bill: 'Why, yes, Jack, sure I do, sure I own my own home. I got my title to the house and land, I keep up my taxes, I own my home as far as any man can ever own his home.'

Jack: 'Well said, Bill, that's fine. That's just what I wanted to hear you say. That's just what I expected you to say. You own your own home as far as any man can ever own his home. You keep up your taxes. You own your home but you keep up your taxes. Taxes! How long would you have that home, Bill, if you did not keep up your taxes?'

Bill: 'Not very long, I guess, Jack.'

Jack: 'You're right, Bill, not too long, at least. It may drag out for awhile, and they will give you lots of chance to pay up your back taxes, but if you don't or can't pay your taxes, they will get you in the end. Am I not right, Bill?'

Bill: 'Yes, I suppose you are right, Jack.'

Jack: 'You know I'm right, Bill. Do you know what I call taxes, Bill? I call them rent, rent to the government. They are just as much rent as any other rent you pay, only with a different name. Why, just before I left home, I saw in our little local paper two columns of legal notices, "Property for sale for delinquent taxes."'

Bill: 'That's true, Jack; if you don't pay your taxes, your property is taken from you.'

Jack: 'Here is another instance, Bill. I leased a piece of land from an old fellow ninety-six years old. His mind was as keen, as any I have ever met. He had lived on this spot for 54 years. He had been paying taxes all that time. He told me that he had paid enough taxes to buy the place three times over. Right then he was delinquent on taxes. Only the fact that I was paying enough money for leasing the land was he able to pay up his back taxes and "save" his property. Mind you, paying taxes for 54 years, and still the land and home was not his.'

Bill: 'Jack, I never thought of it that way. I always accepted taxes just like everybody else does. A necessary evil. You certainly are right on that point, we never REALLY own our own homes, do we? We only own them as

long as we pay taxes. But taxes are needed to run the government. What will you do in place of taxes? What is the answer?'

Jack: 'That question is answered in Technocracy, Bill, but I will discuss taxes with you right soon. Just now I want to try to prove to you that you do not need to have any fears about losing some nebulous rights to this "private property" you think you own. The sad part about this taxation business is the many, many heartaches there have been over the sale of property for delinquent taxes which people "thought" they "owned".'

Bill: 'Yes, Jack, God only knows the number of old couples that have had the roof sold from over their heads, to go to the poorhouse, or wherenot, because they could not pay their taxes.'

Jack: 'Bill, the law is the law. It is no respecter of persons, age, condition or whatnot. There can be no exceptions in the law. But it is not only the home, the land, it is everything. Do you think for one moment that we can actually "own" anything if the Government wants to put a tax on it? Where IS your right to private ownership of property? Take your car. How long would you drive your car if you did not pay the license and other fees?'

Bill: 'Well, I own my own car, Jack, because I could leave it sitting in the garage from now to doomsday if I want to.'

Jack: 'Granted, Bill, but what good is a car sitting out in the garage? Anyway, it isn't that they couldn't slap a tax on it,

if they wanted to, only they don't bother because they got you on the license. I believe some States do have a personal property tax on cars. By the way, Bill, I've just been noticing your dog. Sure a cute dog. What breed is it?"

Bill: "That's my wife's dog, Jack, quite valuable they say. Pomeranian."

Jack: "Do you own her, Bill?"

Bill: "Ha, ha! Sure we own her, Jack. Paid a pretty good price for her, too!"

Jack: "What's the tag on the collar, Bill?"

Bill: "Oh, that! That's the dog's license tag, Jack, Five dollars for a bitch."

Jack: "Well, what would happen to the dog, Bill, if she got out on the street some day without that tag on?"

Bill: "Come to think of it, Jack, that is exactly what did happen, and twice, too. The dog slipped out of her collar, one way or another, and without anyone's noticing she skipped out of the house. Did the wife have a fit! The first time wasn't so bad, but the second time the wife and kids hunted up and down the streets for nearly two hours. They were sure scared that the dog-catcher had her by that time."

Jack: "What would happen if the dog-catcher did get her, Bill, without that tag on, or, say, you had never bought her one and he picked her up?"

Bill: "Well, Jack, I suppose, if no one claimed her within a certain time, proving that they had bought the dog license, she would be killed. If you came to claim the dog and had not

bought a license, you would be fined besides having to buy the license. In fact, you can be fined for having a dog without paying the license, and if you don't pay the fine, the dog will be taken and killed."

Jack: "Bill, our talk about the dog got your mind off of our original subject. So you neatly fell into my trap. The statements you have just made should prove to you that, actually, we do not "own" anything, no, not even poor little dogs who have to get killed if their poor little masters can't pay the "rent," taxes to you, Bill, on them. I guess many a little shaver has lost his pet that way."

Bill: "No, Jack, I don't own the dog. I'm just "renting" her from the government."

Jack: "Furthermore, Bill, this is a bold statement, but I make it. We do not, in our own country, have absolute control of our own lives. That is, we must, at the command of the State, place our lives in jeopardy or suffer the consequences. Millions of servicemen, and thousands of conscientious objectors, put behind barbed wire, will testify to that. Mind you, now, I am not arguing, whatever, whether or not this procedure is right or wrong. I am merely stating that it is a fact. And fact it is. You cannot deny it. The draftee steps up, a paper is placed before him on which is printed something to the effect, "do you sign this paper willingly?" and he says, "yes." What else can he do, except go to jail? Therefore, my contention is that what we call our "private property" is not our

private property at all! I claim that we only have title to it and the use of it as long as we pay our taxes, our "rent," to the whole of the people in the form of their government. As long as we do pay this "rent" we can do with "our" property more or less as we wish, but even that right is curtailed, as witness restricted residential districts.

The most direct and observable example of this fact is the case of the "dust bowl" areas of the plains. The people are beginning to realize that they have a stake in all natural resources. They feel that the abuse of natural resources through the mistaken notion that each individual can do exactly as he wishes with what he "owns" and "to Hell" with the rest of the people can no longer be endured. When the people who first settled those areas took possession, it was assumed that the land they occupied was theirs, to use as they wished. No forewarning was given as to the disastrous results of their unthinking and unscientific use of the land. Since then, many an editorial has been written by the strongest proponents of the Right of private ownership of property principle, acknowledging that, in the final analysis, the land *does* belong to all the people; that when the land has been destroyed through misuse and mis-handling, it is not alone a loss to the individual who "owned" the land but it is a definite loss to all the people; that the individual IS accountable to society as to his stewardship of the land. It shows that the

people are beginning to realize, though still in a hazy way, that the farmer does not own the farm but is the lessee of the people.

Farmers will be the last to give up their belief in their so-called "rights" to the land. Farmers love the land as no one else does. But the number of farms lost each year through taxation, or mortgages taken out to pay taxes, should surely convince them that they, also, are believers in a shadow of "property rights," but do not have the substance. They should broaden their vision and, instead of being afraid of losing "ownership" in a few measly acres, they actually can be part owners of the whole North American Continent.

Bill: 'That is an idea, Jack. Instead of owning one little home here, and one little old car, I can be part owner of all the homes and all the cars in the country.'

Jack: 'That's right, Bill. By adopting Technocracy you can have the resources of the whole North American Continent at your command. So why worry about losing the "rights" to one little house! I think you realize now what I have been driving at, that, actually all of the natural resources of this wonderfully great, big country of ours are owned by ALL of the people. We admit it, we acknowledge it on every hand, but we cannot seem to take that last hurdle and actually take possession. Through our laws, created by our lawmakers who are supposed to be the Voice of the People, the big majority of us are being continually talked into believing

in a principle which, in theory, advocates the "right of private ownership of property" for all, but actually, in truth, limits the benefits of this principle to a few through taxation. We are continually told that it is right and proper, and so meant by Heaven, itself, that a few should be able to make themselves rich through this "right to private ownership of property" in the guise that we could all do so if we only had the ability! In other words, if we don't get rich, it is our own fault, the door to "Private Property" stands WIDE OPEN!

Bill: 'But why can't I get rich under a private property system, Jack?'

Jack: 'Well, Bill, do you not see that in believing in what is supposed to be a fair and straightforward principle of private property, you have been led and encouraged to believe in a mockery of this principle? Oh, all unconsciously, of course, because no one has stopped to investigate this theory of taxation or rental from the government. For, after all, only the few have sufficient money to pay the taxes required. Therefore, though in principle you are supposed to be allowed to own whatever you can acquire, in practice it does not work out that way. You can only own what you can pay taxes for. And, because you do not have much money to pay many taxes, you certainly are very limited in what you can own. In the meanwhile, under our mistaken faith in this "rights of private ownership of property" principle, the cream of our natural resources is being drained off for

the private benefit of the few who are able to pay these taxes. They, in turn, frame the laws in such a manner that they do not even have to pay the miserable taxes demanded. I could cite you many a case along this line.'

Bill: 'Speaking about skipping taxes, Jack, I guess you know plenty about the timber barons who strip the land of its timber and then turn the worthless land back to the counties for taxes. They've gotten the cream; now the people can have it again.'

Jack: 'Yes, that is true, Bill, that is the way it goes. So you see, under the Price System, the people are supposed to have private property but do not actually have it, because I have proved that nobody has that, nobody! Whereas, in a Technocracy, the very people who are now being told that they would, in a Technocracy, lose all they have because they would be losing their "rights to private ownership," these same people would be coming back into their own. All of the people would be taking over all the benefits from all our natural resources—and these include the fruits of our minds—instead of farming them out to a few. We would simply be regaining all those rights which we have lost for awhile.'

Bill: 'Yes, Jack, I see it now, you have proved, and we do acknowledge it, that everything does belong to the entire public. Because the public has, through its Government, reserved to itself collectively, the right to tax. This is not a moral question, it is a fact. No one, therefore, should be allowed to use

what belongs to all the people for his own private gain. These benefits should be distributed equitably to all the people for the good of all. Is that right, Jack?

Jack: 'Yes, that is right, Bill. But the trouble is, you cannot carry out this fine scheme under our present political and economic set-up. You cannot distribute the benefits of our natural resources to all of the people under a Price System. It just cannot be done. Only the method developed by Technocracy can do it. So, "not owning" a home or a car or a farm in a Technocracy, but paying a "rental" to the State for the use of these things is no whit different from "owning" a home or a car or a farm under our present system and paying "taxes" to the government or losing them. Can

you show me any difference, Bill?'

Bill: 'No, I can't Jack. As soon as people get this slant on taxation, they will certainly go for Technocracy.'

Jack: 'I hope so, Bill. But a word about raising taxes. A government does not produce, of course. Some people seem to think so when they talk about paying off the Government debt. A government is supported by the governed. Technocracy's method of distribution takes care of that. It is service *from* all, a high standard of living for all, but profits to none. To understand this more fully, you will want to Investigate Technocracy and then join the only movement in America capable of promoting the General Welfare of ALL.

Humpty Dumpty Sat on a Wall

'The boldest spirits among the mechanists further claim that in time they hope to bring within reach of their methods a study of the lucubrations, hallucinations, and obsessions of the human mind which, masquerading under the illumination of introspective metaphysics and transcendental philosophy, pretend to solve all the riddles of the universe.'—Professor T. H. Morgan (1886-1945), famous American Zoologist and winner of the Nobel Prize in medicine in 1933, in his book *Scientific Basis of Evolution*.

'Men are born ignorant, not stupid; they are made stupid by education.'—Claude Adrien Helvetius, a French philosopher (1715-1771).

'People are not "dumb" because they lack mental equipment; they are dumb

because they lack an adequate method for use of that equipment. Those intellectuals whose pastime it is to sit on high fences and deplore the innate stupidity of the herd are on a very shaky fence, if they but knew it. Often they are more confused than the man in the street, for they deal in loftier abstractions.'—Stuart Chase.

'There are two modes of investigation, through argument and through experiment. Argument does not suffice but experience does.'—Roger Bacon 1214-1294.

'Not to take authority when I can have facts; not to guess when I can know.'—Oliver Wendell Holmes (as quoted in *Yankee from Olympus* by Catherine Drinker Bowen).

Blueprint for Free Enterprise

ONCE I WENT TO A LECTURE

By Archie Sinclair, 12245-1, and the Peripatetic Technocrat

'Wherefore art Thou, Romeo?'

It seems that scarcity is as necessary to the operation of the Price System as coffee is to 'sinkers,' or Romeo was to Juliet. Certainly, the New Deal during the palmy days of the late depression ordered the curtailment of crops, the destruction of foodstuffs, and directed cattle, pigs and sheep to practice birth control. Is it possible that this had nothing to do with the operating rules of the Price System? Perhaps these good men and true, the brain trusters, thought that scarcity, with its bedfellows, poverty, malnutrition, crime and 'sweet charity,' was good for our immortal souls. One never knows what politicians and economists think, or even whether or not they do, does one?

When the Alcan Highway was being built and after construction work on this project had ceased, tons of material were destroyed because abundance was putting sand in the gears of the holy Price System. We will never know how much material was scrapped during, and after, World War 2. Automobiles, fighter planes, bombers, trucks, jeeps, radios and the like, laughingly called durable goods, were dumped or held in storage to create scarcity. It is not proper to disturb the 'take' of free enterprise. Thus speaketh N.A.M. Last winter, came the cheerful news from Washington that millions of hens had to be killed to keep up the price of eggs. What did the poor hens ever do to deserve a premature fate? Answer: They violated the basic law of free enterprise, i.e., produced too much. Yes, we may

safely say that scarcity is necessary to the maintenance of the Price System.

If we must have the prosperity of free enterprise scarcity, we should like to submit the following plan, not as a solution, but simply as a sort of stop-gap until the Senate and Congress get around to solving the problem, say about 2057 A.D. Here, in a nutshell, is our blueprint for free enterprise.

Why not take all our works of art, paintings by old Masters, statues, zoological specimens, Egyptian mummies, literary classics, and the like, and destroy them? Or, better still, why not have our hard working thieves steal them? Think what a boost that would be to free enterprise. Let us illustrate some of the marvelous results that will come out of our plan.

It's Fun To Play Footie

This plan would give employment to thousands of artists, both real and fake. The fakers have to eat too. Archaeologists and zoologists would have more projects on hand than they could manage. Egyptologists could rummage around the tombs of the Pharaohs until the cows came home bringing cream with them, so that we could have butter again. Our thieves would be so busy robbing art galleries and museums as not to have to bother with banks. The police of all the cities of this land of the free (enterprise) could use lots more help. With all the Irish in soft spots, we might even get a few Swedes on our police forces for a change.

Just think, lawyers and judges

could have lots of cases and fat fees. This would relieve them of chasing ambulances or working for railroads on the side. Journalists would not have to face the spectre of useful work. They could concoct new columns of heart throbbing, human interest stories. There are formulas for it.

Man bites dog is news. Boy meets girl; boy loses girl; boy gets girl back is love. Murder will out is mystery. Crime does not pay is virtue. Every Cinderella has her Prince. Then there's always dear old 'Mom.' She waits patiently besides the lighted windows for her wandering boy to return home. Crowned in the glory of 'silver threads among the gold' she waits, whilst the candlelight gleams softly through the sycamores and her Johnny is tiptoeing with the Daisies in some joint down by the river. This theme has a number of variations.

Our plan would be a great boon to editors too. When the proper stage of organized confusion is reached, they can fume forth with new indignations about the State of the Nation; the Brotherhood of Man; the fatherhood of free enterprise; the desecration of art, the laxity of police officials, the tie-up between crime and politics, ad infinitum, 'add stinkum.' News kids could become bloated plutocrats from peddling bloated stacks of bloated news?papers. At least they'd get bloated from yelling 'Wuxtry.' Yes, our free press is a wonderful institution.

Smooth politicians, quick to sense the new spirit of the times, could slide into the public trough as slick and easy as a peeled log going down a 'skidway.' Reform tickets would be all the rage. The 'outs' could indict the 'ins' with a straight face. While the 'ins' could 'point with pride' to their record while praying that nobody will ever really uncover it. Every

'right thinker' in the land could 'view with alarm' the state of public morals. His majesty, the great American voter, would be in paradise. He could make X marks on ballots till he got blue around the gills. A standard scale of \$2.00 or more per ballot would assist the distribution of purchasing power immensely.

Instead of building more poor-houses, we could build bigger and better insane asylums and jails. These are more profitable to build and maintain than poorhouses. There is more 'take' all around what with slave labor contracts, rakeoffs by parole boards, etc. Not to be sneezed at is the fact that, if we build enough nut houses and jails and lock up enough crack-pots and crooks who are dumb enough to get caught, it might even solve our mass, low-cost housing problem. There's no dough in that line anyway. After all, we should let every pressure group in the land get its crack at John Q. Citizen before turning him over to the tender mercies of 'sweet charity.' This is of the essence of free enterprise. It's not proper to interfere with 'rugged individualism,' at least not until it has become ragged. Thus, also, speaketh N.A.M.

'She'll Be Driving Four White Horses When She Comes'

When this new day dawns, movie hacks and radio 'slap happies' will acquire a new repertoire of plots and jokes. At first these won't stink quite as bad as the ones peddled now. Soap operas, murder mysteries and nine-star cinemaniac spectacles will be elevated to new heights of Price System gibber by slanting to up-to-the-minute 'angles.' A vast new artistic and literary expansion will follow resulting in untold blessings to the imported natives of Carmel-by-the-sea, Hollywood and good old Broadway.

Just think of all the books that could be written about our resuscitated culture; and all the new peppy four-color magazines that could be piled up on top of the ones on the newstands now. This would be an enormous boost to the printing and publishing industry. And say, what about that basic industry of free enterprise, advertising? It might very easily expand so terrifically as to advertise the entire Price System into a new rose-colored age of permanent prosperity.

Then there's the Chautauqua and public lecture circuit. Think of all the long-winded talks which could be given on social problems at \$2.00 per head, including Federal tax. Every viewpoint could be represented, liberal, reactionary and asinine. Yes, sir, free enterprise believes firmly in free speech for all. It's in the constitution, ain't it? The only guys we clamp down on are those 'ignorant foreigners' or 'reds,' and those misguided native sons-of-blockheads who insist on dragging up nasty facts. They don't know which side their bread is buttered on anyway.

Even St. Peter away up there by the Pearly Gate, nodding in his bushy beard and bewailing the paucity of new membership applications to Heaven, would be immensely heartened. For, has it not been written by Plato that Socrates once said: 'The soul takes nothing with her to the other world but her education and culture.' In view of this it is simple to visualize the tremendous accretion that will be added to the river of the just and righteous that is eternally spiralling upward to its reward. We mean, after our plan goes into effect, for, boy, what a culture it will bring. Say, come to think of it, won't hell be an interesting place when all the free enterprisers are safely behind the ramparts of heaven. That's an idea.

The best part of this little plan,

however, is the fact that it would harm no one nor deprive anyone of the right to life, liberty or the pursuit of happiness. In fact, people could chase happiness harder than ever. Certainly, it could not hurt the creators of our works of art. They are dead; so are the mummies; so is free enterprise but it insists on stinking up the premises. We would not be depriving any one of food or other necessities. The cost of living would drop, wages and employment would rise. Small town and big town would boom, and John Farmer would bust with prosperity. In toto, our plan would bring about the Renaissance of 'Normalcy' for good old free enterprise. We offer it to the people of the U. S. freely, as the Scotchman gave his sister the measles.

If this typical free enterprise program doesn't 'send' you, it is plain that you are not a true blue, red-blooded, 102 percent American. In that case you must be one of those 'ignorant foreigners' or 'reds' we're always hearing about.

No loyal son of our founding fathers would ever betray the cardinal principles of free enterprise. One of the biggest ones is that the broad highway leading from log cabin to White House must be kept open for every chiseling Son of a beggar or big shot in the land. What if the road does lead through an occasional oil field, a smoke-filled hotel room, or the basement of a convention hall. This principle is the top glory of free enterprise. Now that we have completed the presentation of our plan, we will proceed to the next phase of the program.

*The Meeting Will Please
Come To Order*

Now that we've presented our plan for the resuscitation of the prosperity of free enterprise, our lecture is over

and some questions are in order. What do you think of the plan? Who has a better one? One at a time, please, and be sure to confine your questions to the subject.

Almost before the speaker had finished, a cool-looking individual, who appeared to be hot under the collar at the moment, popped to his feet. He was dressed in a Gray Suit and wore a strange looking pin in his coat lapel. It resembled two tear drops in a red and silver field. 'Mr. Speaker,' he shouted, 'I'm disgusted. This whole plan is specious. It won't solve any social problems. Now—'

The speaker fired right back. 'That's enough; you're out of order. No speeches allowed. It's a specious argument, you say? It won't solve any social problems, eh? Well, who said anything about solving social problems. We told you in the beginning that this plan was not a solution but only a stop-gap until Congress gets around to solving the problem, say about 2057 A.D. You heard that, didn't you?'

'Yes,' admitted Gray Suit, 'but your plan sounds exactly like—'

'I said no speeches, please,' interrupted the speaker. 'My plan sounds exactly like what? Never mind, here's a gentleman who has a legitimate question. What is it, Sir?' The second questioner was an elderly gent. He said: 'Well, Mr. Speaker, it's this. Your plan sounds to me like a proposal to base our entire social system on rackets and crime. How do you answer that?'

Before the speaker could reply, Gray Suit was on his feet again. He was definitely hot under the collar by now. He shouted: 'That's the point I was trying to bring out. Your plan is just exactly the same as what—'. The speaker drowned out the rest of

Gray Suit's words 'with a banging gavel. He thundered: 'Listen, brother, this is not an open forum. You're out of order. If you don't quit trying to break up this meeting, I'll have you thrown out.'

Gray Suit sank back into his seat, red-faced, and muttering. Another hand went up and the speaker turned. It was a young woman, well dressed (strangely, also, in Gray) and keen looking. The speaker beamed: 'Yes, lady, it's a pleasure; what is your question?'

'Well,' she replied, 'Mr. Speaker, I've followed your train of thought closely and I can't see any difference between what you propose and what has actually been done in the last 20 odd years. How do you answer that?' As she leaned forward, a furpiece around her shoulders slipped to one side, revealing another of those strange, teardrop pins. The speaker hemmed once and was getting all set for a couple of haws, but he never got around to answering. Gray Suit was out in the middle aisle, demanding the floor and roaring:

'Listen, everybody! I don't give a damn if they do throw me out. I demand to be heard. When the speaker announced the question period, he invited anyone who has a better plan to bring it up. You all heard that. Now, do I get the floor or not?' He looked confidently around, well knowing that the great American public has a soft spot in its heart for every David battling his Goliath. Cries of approval rose from the crowd. 'Let's hear what Gray Suit has to say. We listened to the other guy, didn't we? Go on, fellow, speak your piece.'

Gray Suit jumped up on the platform and saluted twice, once to the audience and once to the lady with the furpiece around her shoulders. He

was no longer hot under the collar but cool and collected.

*'If In The Blackest Hell
There Be a Blacker'*

'This plan for the revival of free enterprise boils down to only one thing. That is, just more and more of the same old hogwash we've been getting for 20 odd years. Free enterprise means just one thing. That is, the freedom for a minority pressure group to rape the General Welfare. It means the freedom to maintain artificial scarcity, poverty, malnutrition, poor public health, in spite of all the known methods for abolishing them. It means the freedom to waste our irreplaceable natural resources. It means the freedom to destroy the prospects of ourselves and future generations for a more abundant life.

'It means the freedom to distribute purchasing power by means of rackets, crime and black markets. It means the freedom to condemn millions of citizens to low living standards, to confine them in filthy, high-rent slums, and to sabotage all proposals for mass, low-cost housing. It means the freedom of a prostitute press to serve the vested interests.

'It means the slippery, two-timing politician who sells himself to every pressure group. It means the futility of voting one gang of crooks out and another gang in. It means jails, poor-houses and insane asylums for millions who cannot adjust themselves to the insanities of a free enterprise system.

'It means the moronic movies; the advertising controlled radio; the politician controlled school; and the oily ecclesiastic, who after being entrusted to interpret the faith of his parishioners in a super-human power which is placeless and timeless, then betrays

that faith and perverts it into clerical interference in government and education. "Render unto Caesar the things that are Caesar's and unto God the things that are God's."

"This whole plan, presented here tonight, is 100 percent anti-social. The real meaning in free enterprise can be boiled down to one sentence. It is the arrogated privilege of the select minority to prosper at the expense of the natural resources and people of America, and to forestall social change by propagating mass social ignorance and superstition.

X Is The Unknown Quantity

'It is high time the great American people began to examine the life of their social system under the bright light of facts. This idiotic, rainbow-chasing Price System is doomed. It has been weighed in the balance and found wanting. With all the resources, knowledge and tools at hand to correct our collective social ills, it stumbles along from one tragedy into the next. The advances of Science and Technology have written out the death warrant of Price, Trade, Commerce, Monetary valuation, Exchange, and Free Enterprise in America. This fact is the unknown quantity in our modern social life. It will wreck our entire civilization unless we bring it under control before it's too late.

"The real, social meaning of science and technology has been sedulously concealed from the people of America. It has been covered with a conspiracy of silence by the "don't give a damn for anybody but myself," free enterprisers; by the lickspittle tycoons of the Fourth Estate; by the Caspar Milquetoasts of Education; by the political leeches in our Halls of

Legislation; and by those clerical termites of Churchianity who are betraying the blood that spilled on Calvary for the son of man.

'Science has a social meaning. It is rich and full of promise. Within the context of science and technology are the tools for building into reality all the hopeless dreams and longings that have plagued and baffled men for generations. Science says to all, young and old:

I have the answer to your problems. I know how to abolish poverty, ignorance, disease, insecurity and war from among you. I offer you not just four abstract freedoms but many real things you never had before. I have the key to abundance, security, distribution, individual and social integrity and lasting peace. I am a friend of man. Why do you not let me in? The hour is getting late for you. The social unbalance of your Price System increases daily. It is dangerously close to the point of social intolerance. Better think it over. If you want any references, just study my past record of performance. It constitutes a certified promise that I can do the job.

Gray Suit leaned forward. An intense sparkle was in his eyes. His voice was almost husky. The audience sensed his emotion and the power of the facts put forth. It was so quiet in the hall, you could hear the 'El' train rumbling by, over two blocks away.

Once I Went To A Lecture

Gray Suit paused a second, then continued: 'The social aspect of science and technology has been collected

and coordinated into a new body of thought. It is known as Technocracy. It is a new branch of science. As such it has had to struggle for recognition. Because Technocracy deals with the social aspect of Science and is not purely technical, the Price System has been unable to exploit it for profit. Because the findings of Technocracy run counter to the vested interests of free enterprise, it has met with a conspiracy of silence. Because Technocracy will not distort facts, will not compromise with facts or sell itself to the God of things as they are, it has been slandered, smeared and lied about.

'That is why most of you may not have heard about Technocracy, and perhaps some of you who have heard have gotten the wrong impression. It was given to you that way by some stool pigeon of the status quo, busy grinding axes for the Price System. Technocracy has no axe to grind, not even one of its own. It is dedicated to North America and ALL its people as one. Since Technocracy is the social aspect of Science, you might call it the Science of Society. To put it another way, you might say that Technocracy is the science of how to apply science to the social system.

'Technocracy is the better plan that is available to us now. When this inverted pyramid of society called the Price System topples over, we will have to have a designed social structure to replace it. The answer is Technocracy. The schematic design is ready. It defies scientific dispute. We can't argue with facts. But, we can cooperate with them. The ancient Price System is almost washed up. Technocracy brings good news to all Americans. It has something far better.

'Now, the hour is getting late.

Neither this speaker, nor any other, could possibly tell you all about Technocracy in a few minutes. The subject is tremendous and it's tremendously important that we understand at least the major points involved. Therefore, Technocracy again puts forth its standing offer and challenge to all Americans to Investigate Technocracy. It is wide open for that purpose at all times.

Technocracy is your friend. It

will be our only out when the Price System collapses. It will be America's only salvation from social chaos or, what is worse, the living death of social fascism.

'I thank you for this opportunity to clear up a few points and ask you again: Investigate Technocracy, join the Organization, and assist in building the New America of Security and Abundance for all citizens.'

Thank you and good night.

From Here on Out

Keep Your Eye On The Trends

by R. F. Novalis

Increasing Trends..	All-Time LOW	Latest HIGH Figures*
1. DEBT (U. S. Govt.) per person.....	January 1, 1840 \$0.21	2,000 Dollars
2. ENFORCED LEISURE (unemployment.....	October 1944—630,000	2,470,000 People
3. MACHINE TOOLS in use** (cumulative total).....	1925.....700,000	1,811,500 Machines
4. BANK LIQUIDITY (percent deposits to reserves, Federal Reserve Banks).....	1921.....60.0%	98%
5. GOVT. (U. S.) BONDS to total bank invest- ments (Federal Reserve Banks).....	1929.....39.0%	93 1/2 %
6. GOVT. (U. S.) BONDS to total life insurance investments	1915......0005%	65%

Decreasing Trends	All-Time HIGH	Latest LOW Figures*
1. PRODUCTION (combined factory-mine-railroad freight) Index basis 1919-20 monthly aver- ages equal 100	Oct.-Nov. 1943—250	180.
2. MAN-HOURS WORKED (total of man-hours in factory-mine-railroad) (Note: 1919-20 month- ly average was 2.54 billion) Actual number.....	Oct.-Nov. 1943 3.14 billion	2.41 billion
3. MAN-HOURS PER UNIT in above industries, combined average	1919-20—100	41%
4. ENFORCED SCARCITY (load factor on installed capacity of above industries)	No Figures	22%
5. INTEREST RATES (combined average yield on Govt.-municipal-corporate bonds)	1919-20 6.12%	1.76%
6. OSCILLATION DOWNWARD of factory output since all-time peak (Oct.-Nov. 1943).....		38%

*January-February, 1946, Two-month Average.

** No figures available on number of machine tools scrapped

Ed. Note: See January-February "Great Lakes Technocrat" for detailed explanation of this table

From the Camera's Eyeview

Progress of the Price System

The Code of Hammurabi, promulgated about 4,000 years ago, states: 'If a builder has built a house for a man and his work is not strong, and if the house he has built falls in and kills the householder, that builder shall be slain.' That was the building law in the most advanced nation of the Price System 4,000 years ago. It set up a performance standard designed to protect the public against dangerous and unscrupulous building practices. That aim is still, ostensibly, the underlying principle of building laws. But, we have made a lot of progress since then. In the most advanced nation of the Price System today, free-born Americans are subject to the provisions of over 2,000 different building laws. Many of these are so complicated that it takes a battery of architects and politicians to interpret them. Chicago's Building Code, for instance, runs to almost 600 pages. The Model Code of the National Board of Fire Underwriters totals over 80,000 words.

Of course, society is technically more complicated than it was 4,000 years ago. But, one major factor remains the same. We exist now under the same basic type of Price System as prevailed then. The difference is that today it masquerades under the phony slogan of 'Free Enterprise.' Under this protecting canopy the underlying principle of building laws has been sabotaged. Most of these laws today are not concerned simply with preventing dangerous and unscrupulous building practices. 'Something new has been added.' They are now drawn primarily to protect the vested interests of builders, material suppliers, real estate interests, landlords and organized (handicraft) labor. The householder is fair game for all. This minority control over housing is the reason why most Americans live in 'dog houses' and also the basic cause of the present housing shortage.

The political machination by which this 'progress' was achieved is as follows. The Code of Hammurabi was essentially a simple 'performance code.' It stated in terms of function what a structure was supposed, or not supposed, to do and left the way clear for new methods and materials. The free enterprise codes of free America are essentially 'specifications codes.' They state in terms of materials the specifications that must be complied with. By placing specifications standards ahead of performance standards, the free enterprisers have closed the door on new methods and materials. Thus the status quo is frozen for the benefit of a minority group. This social sabotage has delayed the impact of Technology in the housing field. It won't be that way much longer. Technology is hard at work. Let's look at a few examples. Then, we can continue our story on Page 33.

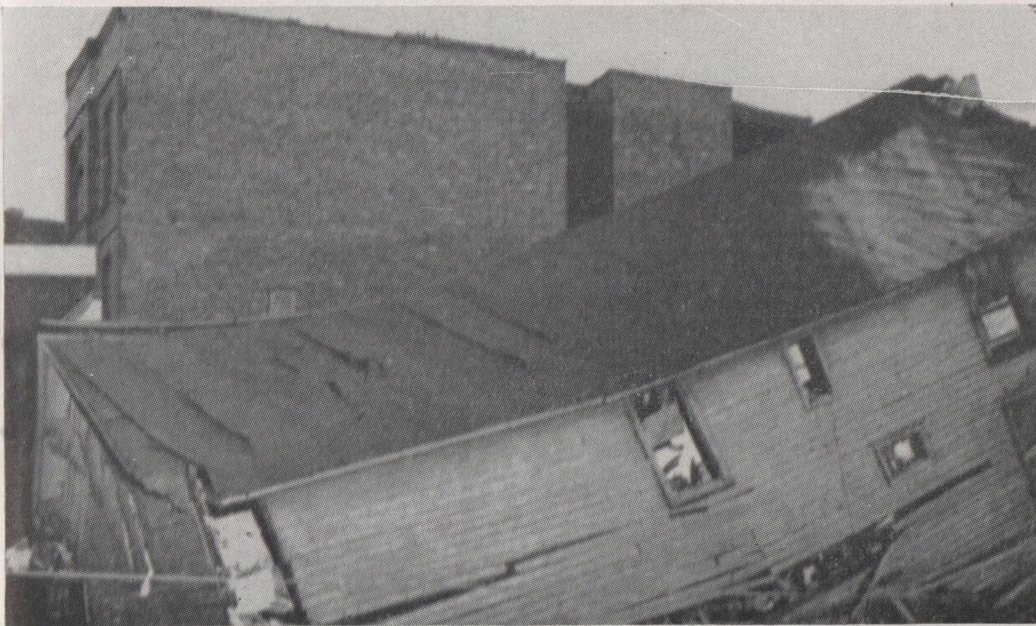


Photo: Illinois State Housing Board

Four persons were buried alive when this Chicago house collapsed on the night of July 3, 1944. Timber decay was blamed. That was effect. The decaying Price System was the cause. The State Board says: 'The property in the above picture produced a net profit of 17 percent of the owner's investment. This fact is reason enough why slum housing persists.' Who could say it any better?



Photo: Thermoid Company

There are enough men on this job to hint that the materials may have been specified by an obsolete building code. But, Technology is there too, performing to standards. It's a portable, endless belt, brick conveyor that displaces hod carriers. Technology dictates less work for more production and distribution. This sounds inconsistent but it's a fact. Any Technocrat can prove it.

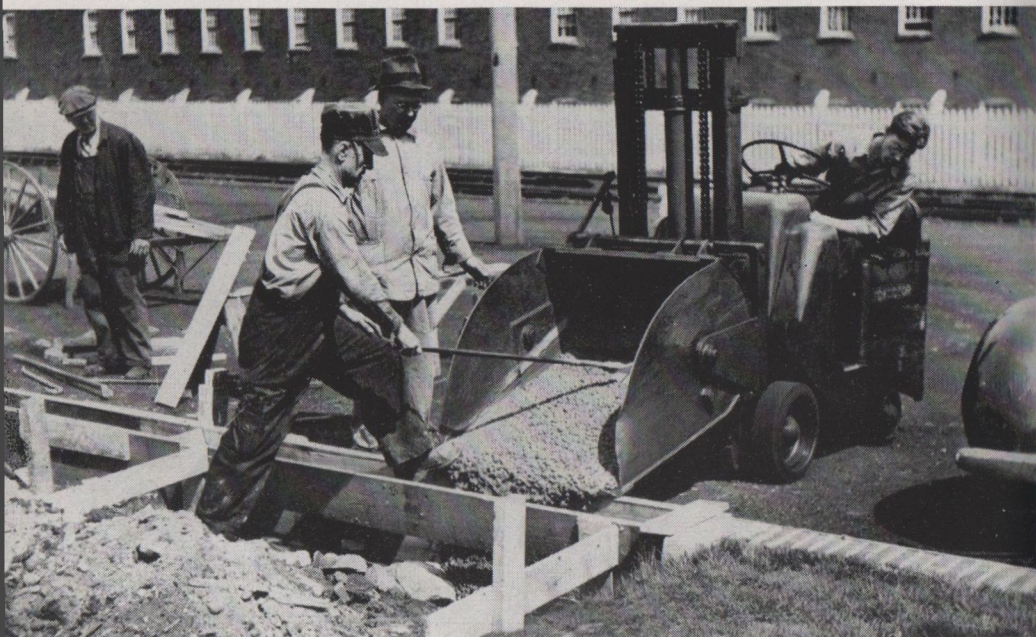


Photo: Towmotor Corporation

Engineer Joseph Howard at Boott Mills, Lowell, Mass. devised a scoop attachment for a Towmotor and added it to his maintenance crew. This reduced crew from 9 men to 3, and improved efficiency. Device hauls coal from bunkers to boilers, ashes from pits to trucks, concrete from mixer to forms. Technology knows how to perform. Politics and Price know only how to specify interferences.

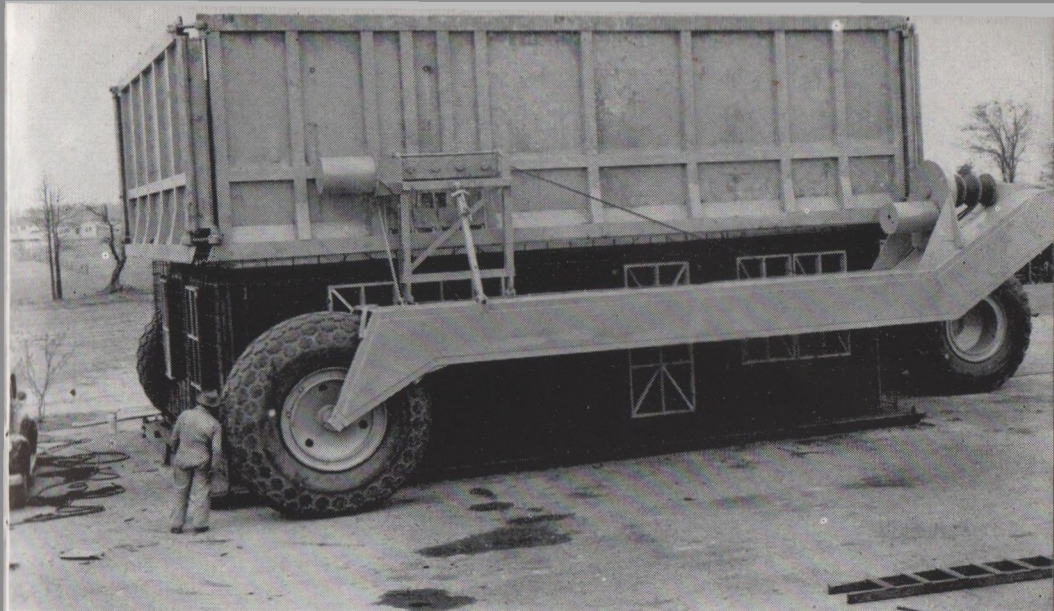


Photo: R. G. LeTourneau Inc.

Technology invades the housing field. Here's the Tournalayer, a machine that casts in one piece the basic structure of a 4-room, reinforced, concrete house complete with outside walls, roof, eaves, window and door frames, inside center partition, electrical wiring, outlet boxes. Here, outside form is being lowered around the inside form. Both forms are set in position on a base.

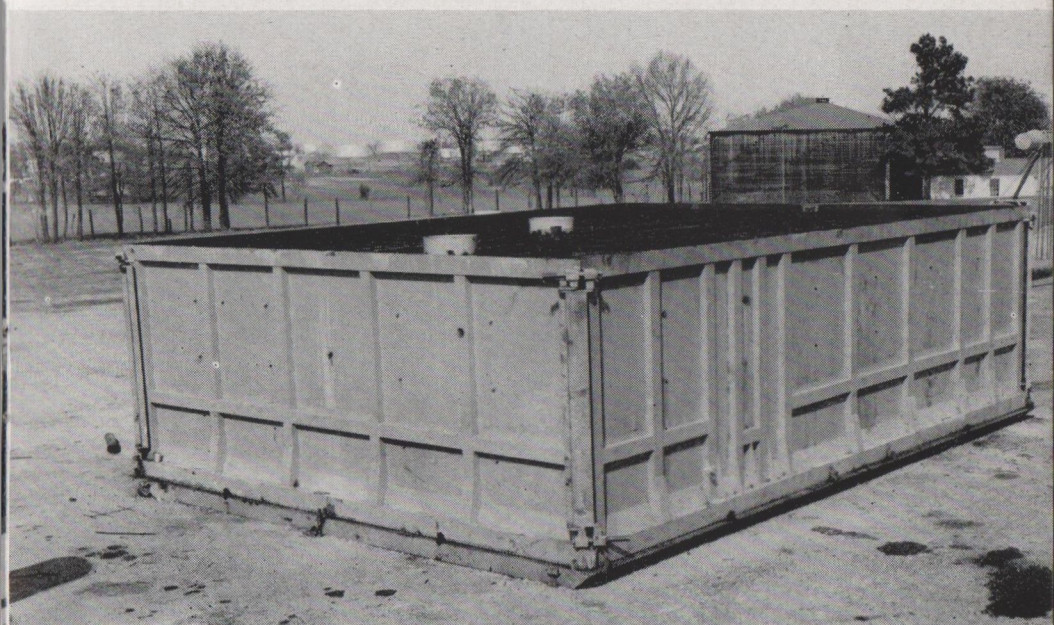


Photo: R. G. LeTourneau Inc.

The forms are assembled ready for concrete to be poured in the 5" space between them. Window and door frames, conduits, outlet boxes and reinforcing steel mesh are attached lightly to inside form. When mixture is set the inner form is contracted by means of levers from the concrete, thus leaving basic structure attached to outer form with above items embedded in proper position.



Photo: R. G. LeTourneau Inc.

The Tournamixer ejects concrete mix up to an elevation of 16'. Material is worked closely around window and door frames. Then the roof is poured on. Flat roof slopes to a center sump with a single drain buried in the concrete. After pouring the molds are allowed to set until concrete hardens. One machine and mixer can service a dozen sets of molds. Forms can be used many times.



Photo: R. G. LeTourneau Inc.

The Tournalayer picks up outside form and house to deliver and set down in permanent location. The pick-up trailer is equipped with three point suspension electric hoists for leveling and a main hoist for lifting. The entire empty assembly including base can be picked up and hauled to any location and is ready for pouring the instant it arrives. It needs a wide, level roadway.

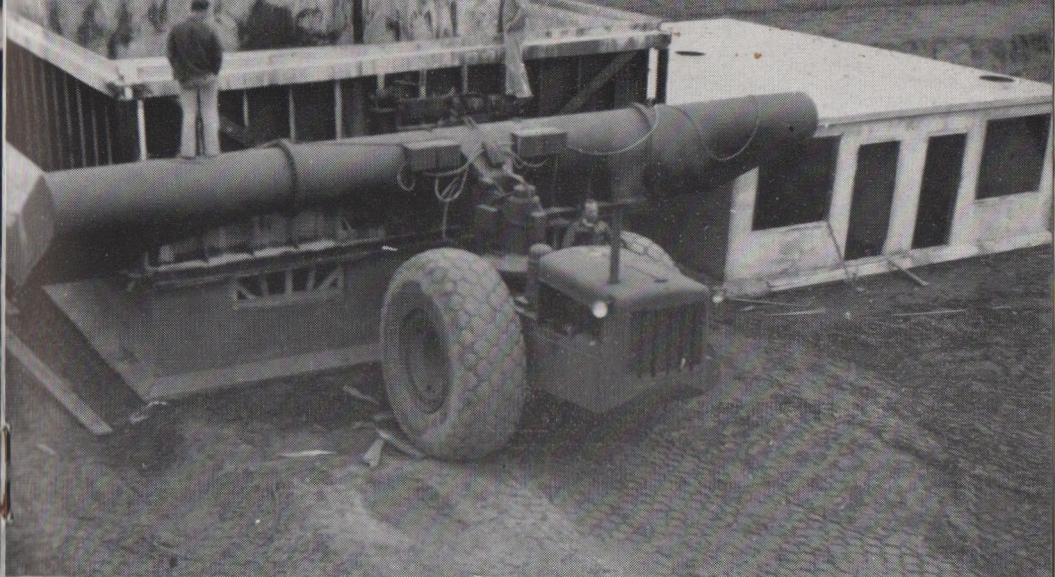


Photo: R. G. LeTourneau Inc.

After being set down on its foundation the outer form is expanded away from the house, hoisted clear and hauled away. Tournalayer's job is done now and house is ready for finishing. A local contractor takes over at this point to install floors, plumbing outlets, additional partitions, etc. Tournalayer now returns with outer form to central operating point for the next pour.

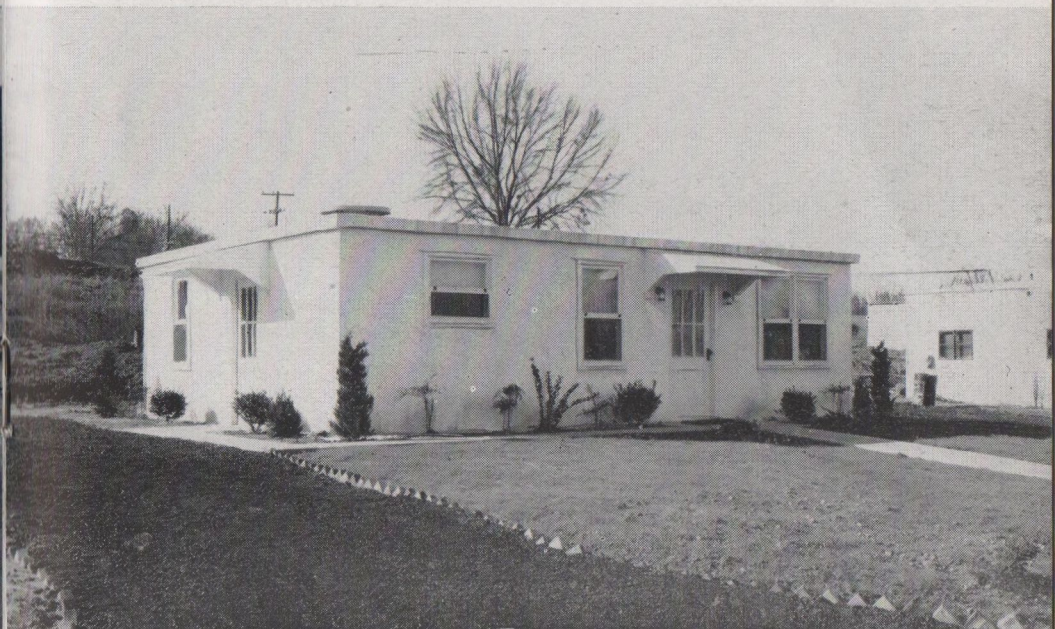


Photo: R. G. LeTourneau Inc.

Here is a Tournalaid House. It's 32'8" long, 24' wide and 10' high. Price of basic house with choice of window styles is about \$1500. This includes doors and windows installed, waterproofing on outside, painting on inside. Houses are permanent, easy to maintain and heat. This is first model. Houses with basements and second story are being worked out. A Salute to this Technology!



Photo: The Ingalls Iron Works Company

However, the bulk of Americans will not be housed in individual units in the Technate. The material and energy cost of housing 1,000 families in a large residential unit is much lower than for 1,000 separate units. A house performs a vital social function. This can be fulfilled much better in large units. There are also dozens of special advantages from the individualistic viewpoint.

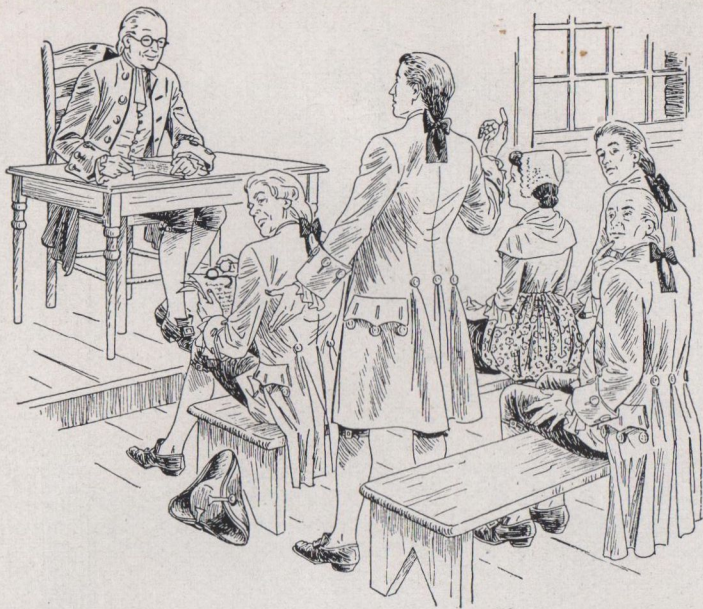


Photo: Pennsylvania Central Airlines Corp.

In handicraft-agrarian days we could properly discuss the 'what' and 'how' of social problems. They were simple then. Today they are complex. The 'what' can be measured and the 'how' is technical. This limits discussion to overall 'whats'. For instance, what do we want, abundance or scarcity, equal opportunity or special privileges? Getting what we want is an engineering job. Catch on?



Photo: Burroughs Adding Machine Co.

Here is a battery of High Speed Bank Bookkeeping Machines. It's Technology applied to finance. There's no discussion here. Figures tell the story. That which can be determined as a matter of fact is not a fit subject for discussion or opinions. Carry this idea into effect on our major social problem and the correct solution will come out, but quick. This is a fact, brother.

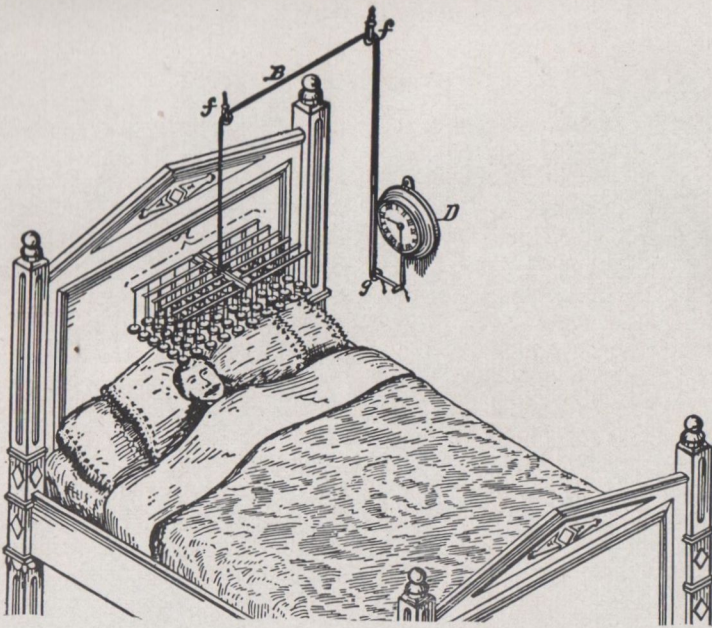


Photo: Felt and Tarrant Manufacturing Co.

U. S. Patent No. 286,265, granted 1882 is a goofy device to wake up a sleeper. It's no crazier than the American people's 1882, dreaming attitude in the Power Age of today, that if we just let things ride they will work out somehow. They won't! Technology has set a time limit on the life of the Price System. Better wake up before the facts wake us up the hard way. Let's quit dreaming.

We All Live In The Same House

(Continued from Page 25)

A dwelling house is a machine for living. In the words of the U. S. Housing Authority, all of a family's 'functions, biological, social and administrative, center in the home—eating, sleeping, procreation, child nurture. It's health, comfort, social and civic life, in short its degree of civilization, depend on qualities inherent in the structural plant which forms its shelter.' A house, then, is an operating social mechanism. It consumes materials and energy and turns out products. Its function is to meet the performance standards inherent in its important social role.

We have seen how Technology is doing its best, under the Price System, to solve the housing problem. However, the Price System is doing its best to prevent the housing problem from being solved. In fact, the Price System is designed to produce social problems and prevent their solution. To confirm this it is only necessary to observe its set-up and operations. It is a form of social organization, arranged to maintain and exploit scarcity. It is equipped with the necessary politico-economic operating rules to make this possible and to permit a minority to fatten on this condition. Thus, social problems are produced. Solutions must be avoided at all costs, else the rackets come to an end. The housing problem is only one of a host such as health, education, food, crime, juvenile, race war, accident, waste, divorce, etc. problems which are flourishing abundantly. The only way the Price System could solve these problems would be for it to first, abandon its major function of exploiting scarcity and turn to producing abundance, security and equal opportunity for all. This job is contrary to Price System design. But, Technology can do it in North America. In fact, the schematic design of a better social system is ready now.

The North American Continent is equipped with all the machinery, materials, energy, personnel and know-how to install such a system now. Yet, upon this magnificent foundation the Price System has erected the shoddy house we all live in. In this unstable social mechanism, we lead our paltry lives from birth to death. The Continent offers us abundance, peace and security. The Price System whittles this down to scarcity, war and insecurity.

Today, our house is in a ramshackle condition approaching the collapse point. Before it caves in around us, let's hunt up the builder and get even. It's easy. Just go and look in the mirror. There he is, the most effective interference control of all, a microcosmic reflection of the ancient Price System. It's high time we got our collective heads together. Let's repeal the interference specifications and set up adequate performance standards.

There is only one social movement in North America equipped to explain this problem correctly. That is Technocracy Inc. If you want to live in a better house, join Technocracy, investigate the facts and learn what must be done. It's our house, isn't it? It's our Continent, isn't it? Well? What are you going to do about it?

JOIN TECHNOCRACY!

Primer of Technocracy

How The Better Half Looks At It

By Ethna Hackett, 7340-1

Keeper Of The Fire

WE ARE here and can stay alive on this earth only because of the Sun. Everything that moves, breathes or has its being in the earth, under the earth or in the sea lives through the energy derived from the Sun. Coal started hundreds of millions of years ago through the energy derived from the Sun. The trees fell and the earth absorbed them. Finally, some one discovered them in the form of coal, still holding the energy from the Sun. What makes our fires burn so brightly? It's the Sun's energy in coal. All plant and animal life, including man, gets life from the Sun's energy. We convert that energy into use forms of all devices and designs. That is how we are enabled to live on this earth.

How do all these use forms, called goods and services, reach human beings? Through a System, a social system, set up by them. By that we mean the organized forms of society under which people have lived in the past, and now. The original reason for the formation of social systems was to produce and *distribute* goods and services. That is the fundamental purpose, or function, of a social system. The larcenous concept of value, exchange and profit crept in later.

The fish in the sea, the wild animals that roam the forests and the birds of the air have not organized their life into the type of social system we know. Nature provides for them. The energy from the Sun produces food for them to eat and water in rivers and lakes for them to drink.

But people, everywhere, are organized under and subject to the rules of social systems. From the date of the earliest records known there has been only one general type of social system. It is called a Price System. That is what we have in North America today. A Price System works by men doing something to earn or obtain pieces of paper, called, in this country, dollar bills, or pieces of metal called gold or silver. According to how much one can collect one way or the other of this paper or metal, one can obtain the things produced. In the past, some earned it by producing, others by selling what was produced for a Price higher than that paid to the producers. These were called the clever ones, who could get others to work for them and thus obtain large amounts of this gold, silver or paper.

All this worked for a long, long time, so long that men have grown to feel there is no other way out ever in this world. Some must work, some suffer, and some, a very few, can own and enjoy. In this ancient set-up of the Price System, women as a group have occupied (and still do) the most inferior position in the social structure. Men were, and still are, dependent on their wages and salaries. Women were, and still are, dependent on their men. As the economic chattels of men, women have been, and still are, the slaves of slaves. This fact has always been glossed over in song and story. However, it still remains a fact.

During the last hundred years or so, and much more during the last twenty-five years, a change came in

to upset this old Price System. Man had always borne the burden of producing along with domestic animals, windmills and a few hand tools to help out; muscular energy did almost all the producing.

Lately, however, what are called 'labor-saving devices' became known, machines which would lift the burden from man. A new source of energy, called extraneous energy, derived from coal, gas, oil and electricity, came into use. Coal produced heat; heat produced steam; and steam pushed its way through and turned a turbine. For the first time, work was being done without man. Today, it's almost like a fairy story. The machine can dig coal out of the mines, it can plant vegetables, pick cotton, make glass, etc. We do not need men to produce with muscular energy. Machines can make shoes and endless other things. How wonderful for man! At last he was freed from work and toil! The machines never get tired, they can produce more than man ever dreamed could be produced, and thus give man health, comfort and a chance to learn how to live.

Why Be A Window Shopper?

America, today, is a land of potential abundance. How can this abundance reach human beings? By the same old Price System of earning and saving, or hoarding and getting others to work for you for pieces of paper, gold or silver? How can it reach people that way, when the only way to produce more is to work less ourselves and employ more machines! It is very puzzling, isn't it? We either have to change the old Price System, which will not work any longer and which prevents all the wonders from reaching human beings; or we will fall into a sad state of chaos. Why do we not plan so that we can have

what is here for us? What is holding it all back, causing us to burn, poison, waste, destroy this abundance? Man is afraid that he cannot let go of his old system of paper, gold, silver, price for profit. Man, with his ancient concepts, folklore and habit patterns cannot realize the change which is already here. From out of poverty, toil and labor has come potential abundance. There is enough, and more than enough, for every human on this Continent, if we can only see an overall plan, a national plan, unified, coordinated, working for the benefit of all.

What happens to 140,000,000 people is vitally important to what happens to us as individuals. If 140,000,000 people had all the food they could consume, all the clothes they needed, and real houses, not the dumps such as people live in today, it would make a lot of difference to you and to me; whereas if you or I obtain an income of \$20,000 a year, it makes little or no difference at all to the other 140,000,000. True, we, as individuals, may live more comfortably and play lady bountiful to a few people around us, but in the whole scheme of life it would have little or no effect. We must learn to think of the social system as a whole; we must learn to become impersonal. If we wish to advance our personal interests (everybody does), then the only way to do it effectively is by adopting an impersonal approach.

Most people are thinking of the effects of a social change on themselves only. 'I would not like,' 'I don't want,' 'I don't believe,' 'I have a brain.' 'Some people use their brains, others only their hands, why shouldn't I receive more?' 'I am energetic, others are lazy. I love to work and keep my self respect. Am I to get the same as the lazy human who

won't work, who is a parasite on society?' etc. Another question so prevalent is: 'Who is going to control? I would want to know the type of man or men who are going to control.'

It's always ourselves, and our own petty problems that we think of. These questions are endless. As we said in the beginning, it is not the men but the social system. How much do we actually know of the men who today are running the country? We only see the strikes, the endless quarrels between labor and management. We read of dangerous cartels on the one hand and that under this system cartels to maintain scarcity are necessary. We must realize now that under any social system, we must play the rules of the game or go under; and the rules of the game of the Price System are based on scarcity.

You cannot let George do your thinking for you. You must find out for yourself the means whereby you live and how it applies to society as a whole. Technocracy was born in America of American conditions. It arose out of a 14-year long survey of our natural resources, transportation, machines, trained personnel, etc. What was discovered by the survey enabled those men to determine the next most probable development in the trend of events in America. Today, all over this Continent, countless thousands of men and women are learning how to wipe their minds clean of preconceived ideas and to speak a new language which will have to be used by the majority in the future. Statements, such as, 'in my opinion,' 'I like,' 'I wish,' 'I believe,' will fade out and be replaced by 'we know,' 'it is a fact,' 'the design,' 'the technique,' 'the magnitude of operations,' and others. Physical laws will decide the form of social system in which

we will live. The physical is that which we can see, feel, hear, taste, touch and measure. All that is real is measureable. What cannot be measured is not real.

Use Your Measuring Stick

Women of America, Technocracy should be easy for you to understand. Housewives measure from the time they awake until they go to bed. The average woman must be scientific and realize the significance of measurement. The size of your family determines the amount of coffee, eggs and toast for breakfast. The beds, as designed, determine the size of the sheets, blankets and spreads. The size of the floor determines the length of the carpet. You do not guess at the size of your windows, or the blinds would not fit. You must measure accurately the size of your clothes, shoes, hats. All these go by measurement. How do restaurants manage? If they want to succeed, they measure, so many slices of meat to the pound, so many cuts of cake, and all are standard size. This is the intelligent way to work, and intelligent women work that way. The whole of society's needs can be handled in exactly the same way. Measure the consumption, no waste, no black markets, no burning, poisoning, ploughing under or subsidizing. Just produce and distribute for 140,000,000 people on the basis of need; and the need is decided by the amount consumed.

By the use of Technology, bigger and better machines, America can produce more than enough to go around. Then we could afford to be generous to Europe, without denying Americans the right to their heritage, a higher standard of living. Always remember that to keep the Price System operating, we must have scarcity.

It won't work any other way.

If we cannot get scarcity any other way, then under the Price System we must create it artificially. That is what we did for years when we ploughed under, etc., until the war came and helped us out. It took a war to reemploy men, to produce more than ever before in the history of man. We hear people discussing the destruction of butter because of lack of markets, etc., and yet we do not realize the miracle of being able to produce such vast amounts. Here is an example of why our system will not work. If the butter had been put out on the market for people to use, the price would have to be so low that from the farmer on down no one could make a profit. There is no value in abundance.

Equal But Not Identical

It is, like a fairy story, with its goblins and its giants. The fairy godmother is TECHNOLOGY. America has gone ahead with all its resources to build a design for living greater than was ever conceived. Are we going to let the goblins, the 'tycoons' of industry, the 'lords' of labor, the politicians, the present outmoded Price System, keep this abundance from coming into our homes? Or, are we going to let the fairy Godmother TECHNOLOGY work for us by applying science to our distribution problems as we apply it to our production! It is an easy problem to understand.

First, we make a blue print, make sure it is correct, then build the design and follow it. An excellent example is the automobile; we may not like it, we may feel it should be otherwise, but if we want to run it, we obey the design. The rules are laid down for us.

Another is the telephone. If we want to get the call, we take up the receiver and put the phone to our ear. We may be lying down, or upstairs, it matters not; if we want the call, we obey the design. It will not work any other way. Now, do you see what we mean when we say the days of 'I wish,' 'I feel,' are over? We operate the mechanism as it is designed, or it will not work.

Women are accustomed to facing the facts of life. In many ways they have a clearer insight into certain things than men have. Some one once wrote that 'Woman is centripetal.' Her tendency is to interpret experiences in terms of her own biological world as the keeper of the fire and the trustee of coming generations. The Price System has translated this in practice into the economics of 'kinder, kuche und kirche.' The natural design inherent in women cannot be denied. Women are equal to men but not identical. As such, they have a 50-50 interest in social change which will free them from the ages-old sentence of mediocrity passed upon them by the Price System 'when knighthood was in flower.'

We hear the commentators over the radio and we read the newspapers. We are told by many wise-acres all the things that are wrong. None of our present-day leaders have come forth with a blueprint or a design for overcoming any of our domestic obstacles. Only Technocracy has such a blueprint, a design fitted to the age in which we live.

Women of North America! We have a 50-50 stake in this great land. Let's let the dead past bury its dead, and take our stand on the side of Science and Technology. Investigate Technocracy! Join this movement and take your place beside the men. One for all and all for one.

Technocracy and Your Trade

The Welder and Flame-Cutter

By Organization Division, 8741-1

Machines Make Jobs—Scarce

'The employment outlook for welders is less favorable than for many other metal working occupations. . . . Thus begins the opening sentence of Bulletin No. 884 of the Bureau of Labor Statistics, entitled 'Employment Opportunities for Welders.' The Bulletin continues in the first paragraph as follows: 'An immediate post-war drop in the number of welding jobs is indicated despite the evidence of increasing use of welding in many industries.'

This may seem strange to the uninitiated. Why should an increasing use of welding be accompanied by a drop in jobs? Haven't the 'explainers' of the Price System always assured us that 'machines make jobs'? A part of this drop is due to the cessation of shipbuilding and other war work. However, the implication in the sentence that a long-time trend is at work in the welding trade is correct. The use of welding is increasing, but welding jobs are not increasing in proportion. Furthermore, the increasing use of welding is destroying jobs in the manufacture and use of bolts, nuts, washers, rivets, etc. It is even invading and competing in the metal casting industry.

Welding might be called an ancient art. It started as a variation of forging, which is the 'process of hammering, shaping, pressing, bending and joining metals while they are in a hot, pasty condition.' For centuries welding remained largely a maintenance and repair function for joining metal parts which had been broken.

In the latter part of the 19th Century the Oxyacetylene gas torch was developed for welding. Following it came electric arc and electric resistance welding. From then until the first World War, the function of welding had a slow development. Progress in welding was stimulated greatly by World War No. 2.

'Comes The Revolution'

In Oxyacetylene gas welding, a direct flame is used to produce a molten condition of the edges of the metal to be joined. Electric arc welding produces a melt of the edges to be joined by an electric arc passing between the metals and an electrode. In resistance welding the natural resistance of metals to the flow of a current produces the heat and joins the metals at one or more spots. There are several special types of welding, such as Thermit welding, atomic-hydrogen welding and helium-arc welding. Thermit welding is used for repairing large units of iron and steel such as large crankshafts, rails and heavy frames. Atomic-hydrogen and helium-arc welding are variations of the standard electric arc method. They are used chiefly for welding aluminium and magnesium.

The occupation of oxyacetylene flame cutter is related to welding. The difference between the two is that the 'burner' uses the flame to cut metal instead of welding it. The two occupations are more or less interchangeable, but flame-cutters constitute less than 20 percent of the trade. However, welding cannot be considered a

single or dual occupation. It is rather an overall function, with several skilled or semi-skilled variations.

Welding applications are divisible into five main types. Maintenance welding, salvage welding, toolroom welding, construction welding and production welding. The first three are modern usages of the centuries' old repair function of welding. Construction and production welding are new uses. Construction welding is used on pipe lines and on structures of metal, such as ships, etc. Production welding is a step in the process of manufacturing such items as automobiles, machinery, electrical equipment and miscellaneous iron, steel and ferro-alloy products. This is the line of application where the most jobs are supposed to be.

Finally, the last division of welding is that between hand welding and machine welding. Machine welders constitute the larger group employed in production. Hand welding is used chiefly for small parts, and those difficult to reach, and in construction work. While acetylene welding is the older type, electric-arc welding is the method most frequently used. Logically enough, its biggest growth occurred between 1931 and 1940. This is illustrated by the production of electric arc welding electrodes during the period. In 1931 only 16,000,000 pounds of electrodes were produced. In 1940 the production had risen to 199,000,000 pounds.

His Brow Is Wet—With Worry

The Census of 1940 lists 139,281 welders, of whom 14,541 or over 10 percent were unemployed at the time. This is a normal condition for the Price System. There must always be a scarcity of jobs, as well as goods and services. It took World War No.

2 to abolish the scarcity of jobs for welders. By the end of 1943, when the peak of wartime jobs was reached, there were 364,000 welders employed. More than 50,000 were women. About 290,000 were hand welders, 26,000 machine welders, and 48,000 were flame-cutters. More than half of the total were employed in shipbuilding.

An estimated 1,500,000 persons received welding training between 1940 and 1944. With the decline of shipbuilding and airplane production several hundred thousand war-job hand welders are on the outside looking in. In addition, the other 1,200,000 odd, who were fully or partly trained to fill 364,000 war jobs, have a slimmer chance than ever of making any connection. Yes, the use of welding is increasing in production, but most of it will be done by machines. Bulletin No. 884 has this to say about it:

The greatly expanded use of welding during the war also stimulated the development of new equipment and methods. These developments tended in many cases to reduce the skill required for welding jobs. . . . A great many welding improvements have as their objective the reduction either of the number of welders required for a given volume of welding or the degree of skill required, or both, and it is likely that the degree of future acceptance of welding as a method of fabrication in many industries is related to—perhaps even contingent upon—the cutting of the welder man-hours required in production. Prominent among these innovations are automatic arc and acetylene-welding machines, which are being applied to an increasing number of production processes..

A considerable reduction in man-hours is possible through the use of automatic arc-welding machines and positioners. The use of positioners (mechanical) to place the work for flat horizontal welding has reduced the time required for some welds as much as 50 percent. . . . employment opportunities in hand-welding . . . will be relatively unfavorable for a number of years after the war. . . . Welding will also be in competition with plastics and with the stamping and pressing of sheet metal, but in these instances, it is more likely that welding will be affected adversely. . . . stamping tends to reduce the need for welding in joining smaller units in assembly of many products.

'It's That Old Devil, Sea'

There you have it. Machine welding is rapidly displacing hand welding. T.N.E.C. Monograph No. 22 states that:

In the production of 1940 automobiles a new method of spot welding fused a 4-door sedan together almost instantly at 222 points. In this type of automatic application, spot welding represents more than a transition from the skilled riveter to the welder, since the mechanism, after being set in motion, advances to the correct temperature, fuses numerous points, and then ceases operation, with hardly any human labor involved.

A study made for the Subcommittee on War Mobilization entitled 'Wartime Technological Developments' lists and describes 99 major developments in welding during the

war years. So it goes. That old devil, technology, is still at it. To make matters worse, or better (depending on how much Technocracy one knows), we're only at the beginning of the application of welding. The Welding Research Foundation allocated \$250,000 for research in 1945. Battelle Institute budgeted \$250,000 for welding research in 1946. The Office of Scientific Research and Development made a huge money outlay for welding research between 1941 and 1945 and farmed the job out to 9 outstanding research institutes. Yes, sir! The boss sure knows a good thing when he sees it. Even the staid American Institute of Bold, Nut and Rivet Manufacturers is worried. They have set up a research program in opposition to welding and in favor of bolts, nuts washers and rivets, at Northwestern University and the University of Illinois.

'This Way To The Egress'

Where does all this 'progress' and counter progress leave the welder? Well, sir, it leaves him smack behind the proverbial eight ball. You don't think this 'progress' is for his benefit, do you? Indeed not! It is designed to eliminate him from the picture as much as possible. Of course, a few will always benefit. That's the way the Price System works. But, the great majority of hand welders, both men and women, are rapidly being maneuvered into the position of being practitioners of a useless skill. Business Week states in its December 29, 1945, issue that: 'And at least one maker claims a single machine can do the work of 40 hand operators.'

'You Can't Work Here Anymore.' That's what technology says to an increasing number of workers in nearly all lines. Welding is a comparatively new occupation. Yet the birth rate

of new jobs created has already sunk below the death rate of old jobs destroyed by technological developments in that line. This is glad news, or sad news, for welders depending on how much Technocracy they know. It's the same way with the overall impact of technology on the entire social structure of the Price System. It's glad news for America.

There is no possibility for the welder to solve his problem apart from the solution of the whole American social problem. His future is tied to the future of every other North American citizen. But there is a solution. As Barnum said to Bailey: 'This is the way to the egress.'

There is a new body of thought dealing with the individual and collective social problems of Americans from the viewpoint of science. It has studied the physical history of America and emerged with the only possible answer. When the welder is tired of chasing Price System rainbows, he

will find Technocracy ready, willing and able to answer all his questions.

The only way to produce more in the Power Age is to employ less man-hours of labor and more technology. The only way to distribute the abundance now made possible by the advance of technology is by the use of technological methods. It can't be done for a Price. Ergo: The only way to get more goods and services and better goods and services is to reorganize our entire social system along engineering lines.

This will provide and guarantee every North American with Abundance, Distribution, Security and Equal Opportunity. What more can the welder ask? What more can any citizen ask? All we have to do is Organize—Educate—and Operate.

Investigate Technocracy NOW!
Then join and help to work for the General Welfare of All. In this will be found the solution to your own problem.

Business or Technology?

'Railways are strips of oak plank . . . the wheels made to fit the rails. In this way nearly three times the weight can be moved by one horse than he could manage on a common road.' (Excerpt from an editorial in *Philadelphia Aurora*, January 1801.)

'The automatic electric block system, in which the wheels of the locomotive strike a lever pivoted to the rail and set signal lights at danger until the train is out of the block, was invented in 1867. The first installation was on the New York and Harlem Railroad.'—*Science Digest*, March 1946.

Ed. Note: Yet, 77 years later, in 1944, only 8000 out of 167,000 miles of passenger road in the U. S. were equipped with automatic train controls and 50,000 miles had no block signal system at all.

DID YOU KNOW that a new machine has been perfected to print railroad tickets instantaneously and thus eliminate necessity for station agents maintaining a large supply printed for various destinations?—*Chicago Daily News*, August 21, 1945.

Fuel consumption is the largest single item of the Canadian National Railways' expense bill. But whereas it took 148 pounds of coal to haul 1,000 tons of loaded cars twenty years ago, today the same work is accomplished with 112 pounds of coal at an annual saving of \$21,000,000.—From *Montreal Gazette*, January 4, 1946.

The number of Diesel locomotives in the U. S. increased from 797 in 1940 to 3022 in 1944. (*Diesel Power and Diesel Transportation*, February, 1946.)

Technology Marches On

They've Got You Coming and Going

By Research Division, 8741-1

Behaviour Control Is Management

THE American Management Association recently held its Spring Production Conference in New York City. A questionnaire sent out before the conference revealed that most industrialists are worrying about how to increase man-hour productivity. That's natural. But, pray, when didn't industry worry about that problem? One thing is sure, the industrialists will never have to worry that a time will ever come when they won't have to carry that pet worry around. For, as long as the Price System lasts, the necessity to reduce man-hours of labor, increase productivity and cut costs will increase. It's a part of the physical trend inherent in the impact of science and technology.

It seems that the problem is particularly acute at this time. For some reason or other, neither industry nor labor have been able to shake off the gravy train psychosis they acquired during the war. Maybe it's the OPA's fault. In any event, management is complaining about reduced efficiency. Ford claims that its post-war labor efficiency is 34 percent lower than prewar. The Freuhauf Trailer Co. says plaintively: "We just want to get back to the 1939-1940 levels." The training director of Johnson and Johnson says: "Industry is full of men who can tell why a machine doesn't work, but not why a man doesn't." The Wall Street Journal says, in its issue of April 25, 1946: "Man-hour productivity started to fall off during the war. Govern-

ment contracts on a cost-plus basis allowed industry to spur production by increasing the total labor force rather than efficiency."

In other words, because Uncle Sam was paying the bill, industry padded its payrolls. Now there seems to be some difficulty about unpadding them, or speeding up the workers. The answers the Managers worked out are as follows: Wage incentives, new incentive standards, incentive pay for foremen, union time-study stewards, employee suggestion systems, worker cooperation, time study methods, social affairs, promotion of athletics, credit unions, cafeterias, rest periods, medical programs and that looloo called the gang-bonus scheme.

The Wall Street Journal says of this scheme: "Under this scheme, a task is determined for an entire group, say ten men. If eight can do the work of ten, the eight then get the pay of ten." And what do the last two get? They get the gate, brother. That's management for you.

There is no doubt the Managers will be successful in slaughtering a lot of man-hours of labor. This is illustrated by the success achieved at Marshall Field and Company's huge Chicago store. A saving of 16,000 man-hours per year was chalked up in the Credit Department alone by simplification of work routine. Essentially all these schemes of Management are efforts to control the behaviour of human beings by orienting environmental circumstances toward the desired end. What the Managers can't take care of, the engineers can, with new and faster machines and

new and better technological processes and methods. There are plenty coming up all the time. (Ed. Note: See *Technocracy Study Course*, Lesson 20)

Quality Control is Engineering

A relatively new method of increasing production and cutting costs is coming into widespread use. It is known as Quality Control. Before the war only about a half dozen firms were using it. Now, over 1200 are doing so. The Quality Control System was originated by Dr. Walter A. Shewart, a mathematician of the Bell Telephone Laboratories. Early in March 1946, the Midwest Quality Control Conference was held at Chicago. It drew over 700 inspectors, statisticians, engineers, etc., from 38 states. Quality Control was first used in 1925 by the Bell Telephone Laboratories. Westinghouse Electric and Manufacturing Co. began using it in 1937. Its rapid growth came during the war after the War Production Board had set up a committee to simplify the system.

Quality control is a system of controlling the work of a machine to exact specifications and testing the output by mathematical sampling and careful scrutiny of products as they go along the assembly lines. When a machine gets out of adjustment for any reason and starts producing 'scrap' the quality control engineers go into action. The work of the machine is plotted on a chart which, with two parallel lines indicating the upper and lower tolerance limits on the piece, tells the experts what is wrong and what must be done about it. Then the machine is reset to exact specifications. Quality standards are maintained mathematically instead of by the older trial and error system. This ups production and lowers costs.

The Army adopted the system early in the war. In one plant 42 inspectors had been needed to check every \$1,000,000 of material accepted under the old method. After adopting Quality Control, 30 of them were eliminated and 12 men did the same job. Before adopting the new system, Westinghouse had 421 inspectors and 21 supervisory inspectors in its Lima, Ohio, plant for 5500 employees. It cost 15.9 cents per man-hour to correct defective parts. After changing over, 206 inspectors and 10 supervisors were laid off and cost per man-hour of defective parts fell to 3.9 cents. The output of a punch press operation put under control charts rose 30 percent; lamp production went up 11 percent and foundry output rose 30 percent.

The Fansteel Metallurgical Corporation was able to cut its scrap on one machine operation from 16.5 percent to 2 percent, and raise output per man-hour. Ninety days after installing control charts, Arnold Schwinn and Co. cut its rejects from 13 percent to 1.7 percent and raised production from 77.3 to 85.7 units an hour. The System isn't limited to inspecting parts and controlling machines. Aldens and Co., a big mail order house, reduced the number of errors in packaging and filling orders by two-thirds, thus lowering cost of handling, adjustment and general operations.

Various other examples of the results achieved by Quality Control Charts were given at the Conference. By cutting inspection delays, for instance, the system reduces in-process inventories and cuts down the storage space needed for material waiting to be checked. It helps to keep the products moving. It also helps to keep the customers moving back for reorders. For, Quality Control can be

pitched on a high, medium or low level. It all depends on what you want. In time of war, a high quality is desirable. In time of peace customers are desirable. And, under this Price System you can't get resales by making things too good.

The *Wall Street Journal*, March 7, 1946, had this to say on this point: 'Mr. Edwards (George D. Edwards, director of Quality Control for the Bell Telephone Laboratories) said the system sometimes shows a product has too much quality for a competitive market. Cost can then be cut by reducing quality.' There you have it. Regardless of all the semi-intelligent rationalizations presented, the fact remains that free enterprise is not interested in making products good but in seeing to it that they are not made too good. That's one of the main points. Of course, all the accompanying blessings of lower unit-costs, higher output per man-hour, etc., are important too. The business of Business is to lighten the sucker's burden (pocketbook). For a classic illustration of the points brought up here, see *Technocracy Study Course*, pages 161 to 164.

Mechanics of the U.S. Forest Service have devised a highly efficient, new type fire fighting plow. It is called the 'Ranger's Pal.' In fighting forest fires, the practice of plowing a wide furrow around the fire has long been employed. In the past the Forest Service has made use of manpower laboring with shovels, rakes and mattocks. In recent years 35 to 50 horsepower tractors, drawing heavy plows, have been used. The latter method was more efficient than the earlier but its drawback was that it took too long to get the equipment in place to use.

Now comes the 'Ranger's Pal.' It is a light plow drawn by an 18 horsepower tractor. Both units can be loaded on a truck and speeded to the scene of the fire. 'The plow' includes a stout beam with

a rolling coulter and a plow of the middle buster or two-way type that plows a clear furrow 28 inches wide into the mineral soil. A set of discs and wings spreads the loosened mineral soil to cover the forest litter on each side of the furrow. The result is a fire line from 48 to 54 inches wide. In the two seasons in which the 'Pal' has been developed and improved it often happened that the 'Pal' has gone in and done the control job before the heavier equipment could get to the fire fighting front. A Ranger with a 'Pal' can get to a fire rapidly in a one and one-half ton truck and can do as much work in clearing a fire line as can a Ranger and 20 or 30 men working with mattocks, shovels and rakes.' (*U.S. D.A. Clip Sheet*, January 6, 1946.) Ed. Note: See *Technocracy Digest*, July 1945, page 19.

'The process by which the excess labor supply of the farms is drawn off to the cities is of two patterns to which I shall apply the simple words "pull" and "push" . . . When the "push" operates, people leave the farms because they cannot make a living there any more. This happens when a machine comes in that is so much more efficient than hand labor that it takes away the workers' jobs by making the price of the product so low that farm families cannot make ends meet any more unless they use the machine (also). A disaster, like the boll weevil, or the dust-bowl drought, may also force farm families out.

'The mechanical cotton picker . . . is likely to operate on the "push" principle. The new developments in sugar-beet growing, i.e., seed treatment to save thinning, and mechanical harvesting, will reduce greatly the use of migratory gang labor. . . . The "push" principle may even begin to operate in some dairy-farming regions.

'If labor-saving is to make headway on one half or more of the farms of the U.S. located on the less fertile lands, some procedure must be devised for enlarging and equipping them. . . . Why stop with farms of 160 to 380 acres? Will not labor-saving equipment be introduced more rapidly if farms are several

thousand acres instead of a few hundred? And will not innovation proceed more rapidly? The answer is, yes, to both questions.

"The most important development in scale of operations has been the increase in size of family farms as tractors have replaced horses in the Midwest and Great Plains states especially. Corn Belt family farms are now pointing toward 240 to 320 acres. A Diesel-powered family wheat farm may run to 3,000 acres. The family poultry farm of the future may include 5,000 hens ;one man is now taking care of that number of layers on a few farms.

"Secretary Wickard in his recent testimony on the cotton problem spoke of two kinds of cotton-harvesting equipment: one, a mechanical stripper used on the high plains of Texas, which reduces the harvesting time to 4 or 5 man-hours per acre, and the total labor time for the crop to 8 man-hours per acre; the other is the mechanical picker which, combined with 4-row tractor equipment for the other operations, reduces the labor

time on Miss. Delta cotton from 150 down to 25 or 30 man-hours per acre. An agronomist in the Carolina Upper Coastal Plain reports 38 bales of cotton from 25 acres on one farm without any hand labor excepting for picking, and adds that the cotton-picking machines demonstrated in his area this year were definitely successful. We can . . . expect that mechanization will not only push labor off Southern farms, but will cause cotton to shift toward the sections which it favors. Artificial price supports can retard such developments, but not stop them. Government aid had best be used to facilitate rather than to prevent them. Secretary Wickard's Reconversion Program for the South is pointed in this direction.'

(From article 'Factors Conditioning Innovations in Agriculture' by Prof. John D. Black, Harvard University, in *Mechanical Engineering*, March 1945.)

Ed. Note: See Forty Thousand Farms in Technocracy, A-15, December, 1938, especially last 6 paragraphs on page 8.

Sacred Cows Are Expensive

"In the past 100 years, Americans have destroyed 230,000,000 acres of formerly fertile farm lands, or more than six times the area of New York State. The destruction is rapidly continuing. Unless it is stopped, America faces a hungry future. That startling warning was issued this week by Hugh H. Bennett, chief of the U.S. Soil Conservation Service. He said the United States has 460,000,000 acres of good farm land left, or only twice as much as has already been destroyed.

"The destruction was caused by poor methods of cultivation and unchecked erosion, Bennett explained. He declared that we cannot afford to waste another acre."—From *Labor*, September 22, 1945.

One fool can ask more questions in a minute than twelve wise men can answer in an hour.—Lenin.

A Department of Agriculture survey shows that 356,000 acres of Louisiana land suitable only for grazing are being used for crops while 2,796,000 acres suitable for crops are being used for grazing or woodland.—*New York Times*, Nov. 11, 1945.

Free enterprise in farming is far more efficient at destroying natural resources than the forces of nature are at creating them.

It takes nature from 300 to 1,000 years to build up one inch of top soil on land. In less than 200 years 'free enterprise' practices in farming have managed to destroy about 3 inches of America's top soil by wasteful farming methods.

There were 5,000,000 rivets used in building the battleship Missouri.

Flashes of American History

Reprinted from 8141, July, 1937

II—The Cotton Gin and Slavery

By Ben H. Williams, 8141-15

The ratification of the Constitution by most of the thirteen original States and the subsequent inauguration of Washington in 1789 as its first President, found the United States fairly launched upon its independent career as a nation.

The total population of this narrow fringe of States along the Atlantic coast in 1790 was slightly less than four million, mostly rural. Roads in the hinterland for the most part were single-horse trails. A journey by stage from New York to Philadelphia consumed three days, and double that time to Boston. New England seemed an endless distance by land from South Carolina.

Slavery and the Constitution

Negro chattel slavery already had been outlawed in some of the Northern States. It had been found unprofitable in the Colonial experience of New England and Mid-Atlantic farmers and manufacturers. Shrewd Yankee merchants, however, had found a lucrative business in the capture of African natives to be sold to southern tobacco plantation owners, or traded in the West Indies for cargoes of rum and molasses for Northern consumption.

The Founding Fathers in the Constitutional Convention discussed the "slavery problem" in a somewhat desultory manner, with little evidence of sectional differences. Delegates from the South expressed doubts about the permanence of the institution, on the ground that its further expansion might prove unprofitable in the South as well as in the North. John Adams of Massachusetts indulged in some philosophical observations to the effect that a wage worker in New England toiling twelve hours a day for a bare subsistence was as much a slave

as a plantation chattel in the Carolinas.

The insistence of delegates from the tobacco and sugar cane States finally brought the Convention to the decision that chattel slavery should remain as an institution in the land of the free, but that the importation of slaves should be unlawful at the end of 20 years following ratification. Cotton did not figure in the slavery discussion at all, since cotton was rarely grown in the South except in flower gardens. The 'irrepressible conflict' was nowhere in evidence in 1787.

Advance of England's Textile Industry

Meanwhile, a series of events had taken place in England that were destined to have profound repercussions on this side of the Atlantic. One after another in the latter half of the 18th century there appeared several remarkable devices in spinning and weaving machinery for the English textile industry, culminating in Cartwright's power loom. And James Watt's improved steam engine had

stilled the clamor of these textile manufacturers for cheap and adequate power. There still remained one serious obstacle to the advance of this revolution thus inaugurated by the textile industry. As one writer puts it: notwithstanding the wonderful inventions and adaptations by Hargreaves, Arkwright, Crompton, and Cartwright of England in spinning and weaving machinery, the arch of the textile industry near the close of the 18th century still lacked its keystone. That keystone was the necessary supply of cotton.

Most of the cotton used in 18th century textile manufacturing was of the long staple variety and came from Asia and the West Indies. The short staple variety was such that the separation of the seed from the fiber by hand made it unprofitable to grow for market. Picking out the seeds from a five-pound lot of raw cotton meant a day's work for a man or woman. A crude roller gin first used in India increased a bit the output of the more easily cleaned long staple variety. As far as cotton was concerned, the budding textile industry of Great Britain had apparently reached an impasse. It fell to the lot of an American inventor to make possible the necessary supply of cotton and thereby to set the keystone in the arch of the textile industry.

Enter: The Connecticut Yankee

A distinguished scientist of a later period evolved the saying: "Chance operates for good only to the mind that is prepared for it." So, when Eli Whitney, in 1792, at the age of 27, graduated from Yale, and shortly afterward journeyed to Savannah, Georgia, to accept a position as teacher in a private school, he had previously passed through a thorough mechanical

training in his home shop on the Massachusetts farm.

Young Whitney had been adept at all mechanical tasks from childhood. But there were no technical schools in the closing years of the 18th century, and no careers for college boys except as preachers, doctors, or lawyers. Many a promising mechanic was compelled to waste his talent.

But fate was kinder to Eli Whitney. Arriving in Savannah, we are told by one biographer that he found the teacher's job taken by another, so Whitney was about to return to Connecticut. However, having met the widow of Nathanael Greene, of Revolutionary War fame, he was invited to remain as a guest at her home, and to study law. Again fate made a kindly shift for the young Yankee. One day, Mrs. Greene complained that her embroidery frame was a wreck and could no longer be used. Whitney offered to make her a new one, which proved much superior to the old frame. A few days later Widow Greene was entertaining some of her distinguished friends. The conversation turned upon cotton raising, and the need of some device with which to separate the seed from the lint. Mrs. Greene showed her guests the new embroidery frame and said: "Apply to Mr. Whitney: he can make anything."

No one took this pleasantry seriously except Whitney himself. Having never seen a cotton plant, the next day he went into the country, procured some of the bolls and gave the same a minute examination. Whitney then set to work in Widow Greene's basement and, after having overcome difficulties such as a mechanic alone might conquer, in a comparatively short time emerged with a completed cotton gin ready for trial. Many years afterward, Herbert Spencer, with a

philosopher's penchant for drawing subjective conclusions, remarked that when Eli Whitney came out of that Georgia basement with his cotton gin, "anarchy was born."

Cotton Comes Into Its Kingdom

This simple invention, so essentially perfect in the original design by Whitney that no basic change has since been found necessary in any subsequent improvements of the original patent model, set in motion profound social forces in more than one direction. Speaking of its effects on the expansion of cotton production, George Iles, in "Leading American Inventors," says:

"In 1784, an American vessel arrived in Liverpool, says Denison Olmsted, Whitney's biographer, with eight bags of cotton on board." It was seized by the custom house, under the conviction that cotton could not be grown in America. In 1785, five bags were landed at Liverpool; in 1786, six bags; in 1787, 108; in 1788, 282. In 1793, the year in which Whitney devised his gin, at least 5,000,000 pounds of cotton were harvested in the Southern States. This huge figure was soon utterly eclipsed; in 1825, the year of Whitney's death, the cotton exported from the United States was valued at \$36,845,000; and all other exports at \$30,094,000. Let us now leap to 1912, with a crop estimated at 7,000,000,000 pounds, worth about \$770,000,000."

The 'Irrepressible Conflict'

Whitney's original gin was able to clean 5,000 pounds of short staple cotton in one day, thus doing the work of 1,000 persons by hand. This displacement of man-hours sounds quite modern, doesn't it? But, at the

stage of American industrial and agricultural expansion in 1793, the effect of that displacement was quite the opposite to that threatened in 1937 by its distinguished successor, the mechanical cotton picker. Cotton plantations not only expanded throughout the richer areas along the coast, but spread inland to the Piedmont wherever cotton could possibly be grown. Slave labor not only became profitable, but very much in increased demand. The fifteen years from 1793 to 1808 when the importation of slaves was to become 'unconstitutional' were banner years for Yankee slave traders. After 1808, 'bootlegging' of 'black ivory' became as lucrative, and less dangerous, than similar 'rumrunning' in more recent prohibition days. Moreover, the breeding of slaves became a regular pastime of Southern plantation owners, so much so that today scarcely a full-blooded African can be found in the United States.

At the same time, not only did the textile industry of England enter upon a period of great expansion, but that of New England also boomed. Many of the sanctimonious Puritans of Massachusetts and other Northern textile centers, who deemed it un-Christian to 'own human being' had no moral scruples against employing children just out of their mother's arms for thirteen hours daily at their fast-moving machines. In old England, also, the story of the ruthless exploitation of child labor in the textile industry, as told in reports of factory inspectors during the greater part of the nineteenth century, is one of the darkest chapters of English history. Thanks to Whitney's cotton gin, the expanding cotton plantations of the Southern States made possible the vast development of the world's textile industry.

Meanwhile, due also to the tech-

nological advance in transportation and other industries, the 'irrepressible conflict' between the two sections became more and more pronounced. The cotton States sought universal legality and freedom of movement of the slave traffic; while sentiment against its extension grew rapidly in the North and Northwest. The 'tariff question' also divided the two sections; the South desiring free trade especially with Great Britain, while the Northern farmers and manufacturers demanded a protective tariff. Politicians, as usual, staged endless compromises, while evading the major issues.

Another form of interference working against a possible peaceable solution of these sectional differences came from a little band of fanatics under Wm. Lloyd Garrison, with their cry: 'No compromise! Immediate and unconditional abolition of slavery!' The

influence of their agitation reacted in such a way as to 'harden the hearts' of the Southern slave owners, and thus to render an objective view of the problem impossible. Finally, secession occurred, a four years' Civil War for the preservation of the Union' followed, and as a 'war measure' Lincoln's Emancipation Proclamation in 1863 formally abolished chattel slavery in the United States.

A simple technological device, in 1793, had thus laid the foundation for seventy years of momentous social change in America.

References:

For the story of Whitney's invention: Geo. Iles, "Leading American Inventors"; Rupert S. Holland, "Historic Inventions"; Dwight Goddard, "Eminent Engineers."

For the expansion of the cotton area and other events leading to the Civil War: Beard, "Rise of American Civilization"; numerous debates in Congress and published speeches of statesmen, abolitionists, and others.

Starting to Percolate

'There's the nearest thing to civil war going on in this country since the firing on Sumter. You've got to take sides, one way or the other. . . . You can't go on being a border state, forever. There are words to be said now that will set the people marching toward a new dawn of peace, equality and abundance. But they are being spoken nowhere in the neighborhood of the White House.'—McAlister Coleman, in *The Progressive*, February 25, 1946.

'Scientists have caused many and tremendous changes in our way of living, and these have had their indirect effects on our social and political forms. . . . Scientists, in effect, become our real governors, behind the scenes, not the political leaders and the special economic interests of all sorts that so often move them. The danger is that political leaders

and great economic interests that have so much influence might fail to recognize the need to adapt and to adapt faster than man ever has had to adapt before.'—Thomas L. Stokes in his column, in the *Chicago Sun*, April 2, 1946.

What distinguishes a scientist's thinking from ordinary thinking is that when a new conclusion is inevitable it must be accepted—whether one likes it or not. One small, youthful fact can slay any impressive, aged theory. Having learned this, scientists unhesitatingly have taken a stand in the present crises. * * * Public and scientists alike must revise their thinking and their politics to suit the needs of the atomic age. When this revision is made, we shall have regained confidence in the future. (Gerald Wendt in *Science Illustrated*, May, 1946.)

Each in His Own Tongue

By Publications Division, 8741-1

Voice of The Price System

From One Rat To Another

Rats are properly the concern of private enterprise. We protest against the city's use of Hitler's methods on us. We have a right as free-born Americans to destroy the city's rats without competition from the municipal government.

Extract from a resolution adopted by the pest exterminator's association of Oklahoma City, Okla., protesting against passage of a city ordinance which would compel property owners to ratproof buildings (as quoted by the *American Freeman*, July 1946).

I Love You Truly

We want private enterprise, and there is no man in industry living that believes more in private enterprise as we know it in America than I do . . . We not only have a stake so far as our wages and standard of living are concerned, but the Congress of Industrial Organizations has a stake with you, maybe even greater than your stake, in preserving our American system of private enterprise.

Van A. Bittner, assistant to the President, United Steel Workers of America, CIO, in a talk before 5,000 leading industrialists at the Waldorf-Astoria Hotel, New York, December 6, 1945. The meeting was sponsored by the National Association of Manufacturers. (as reported in the *Chicago Sun*, December 6, 1945).

Devil Take The Hindmost

We've got a gang in power who think solely of the consumer, and

usually in terms of 'protecting' him—. This is a producing country. —America never got rich by adhering to the consumer's viewpoint.

Herbert U. Nelson, executive vice-president of the National Association of Real Estate Boards, at a luncheon club interview with the Washington Bureau of the *Chicago Daily News* (as reported in the *News*, March 9, 1946).

Oracle of Lafayette Park

We must be careful when we give aid to other countries, that this aid is not used to nationalize their industries against us, to destroy our own competitive system, which, I think, should be preserved.

Bernard M. Baruch, successful Wall Street operator and unofficial adviser to many Presidents, in a letter for publication to Rep. Albert Gore (Dem. Tenn.) (as quoted in *The Nation*, November 17, 1945).

No. 1 Baloney Extra Fancy

Mass production and mass distribution would not have been possible had it not been for the brand system which is selling merchandise thousands of miles from its source of manufacture by using national advertising.

Henry E. Abt, managing director of the Brand Names Research Foundation, speaking before the Chicago chapter of the American Newspaper Representatives Association, April 9, 1946 (as quoted in the *Chicago Sun* of the same date).

Let's Abolish Fire Departments

President Truman claims that national health insurance is not socialized medicine, but if we look around us and take stock of the various socialized services we have, like the fire department, schools, post office and the civil service, we cannot see how the national health insurance plan can be called anything but socialized medicine.

Dr. Josiah J. Moore, treasurer of the American Medical Association, in a talk against Wagner-Murray-Dingell health bill, before the Uptown Lion's Club at the Edgewater Beach Hotel, Chicago, May 9, 1946 (as reported by the *Ravenswood - Lincolnite*, a neighborhood newspaper, May 15, 1946).

Political Conundrum

A more important question is whether children should be taught to depend on the federal government to feed them. Should the tender minds of little children be impregnated with the idea that the politicians here in Washington love them

more than their own parents? That is really the big question in considering this measure.

Representative Frederick C. Smith (Rep. Ohio), speaking against the bill to provide federal aid to school lunch programs throughout the nation (as quoted in the *Congressional Record* and reported by the *American Freeman*, June, 1946).

The Black International

This is no time for crack-pot schemes and theories dreamed up by dyspeptic philosophers. The philosophy taught at Loyola is the same which has been taught in Jesuit schools for the past 400 years. It is the philosophy upon which the declaration of independence and the Constitution were founded. It is the philosophy which will save the future.

Rev James T. Hussey, president of Loyola University, speaking before the citizen's board of the university, at a luncheon in the Union League Club, Chicago, on May 9, 1946 (as quoted in the *Chicago Daily News*, May 10, 1946).

Voice of Technology

Just Chiseling Around

Its effect (advertising) when used to publicize a particular manufacturer's product or a particular merchant's business, may be merely to shift consumer demand from one brand to another or from one merchant to another without increasing the total volume of goods sold.

From the Federal Trade Commission's 1944 report to Congress on 'Distribution Methods and Costs' (as quoted

by the *People's Lobby Bulletin*, May, 1946).

Peace of the Price System

The truth is that UN was designed for failure. The organization of nations is fundamentally powerless and was deliberately fashioned that way through insistence of its two chief authors. The right of veto, vested in five nations including ours is the instrument of its essential impotence.

Keith Wheeler in his column in the *Chicago Daily Times*, May 18, 1946.

It Won't Be Too Long, Now

The first atomic bomb not only killed men and destroyed buildings, but also obliterated at the same time all notions which constitute man's ideas about the political, social and economic world of today . . . Today we are on the threshold of the age of abundance. Shall we permit those who hold the magic key to obstruct the way.

Johannes Steel, in an article entitled 'The Golden Age or Social Suicide' in *Reader's Scope*, January, 1946.

Not A Bad Idea

I wish to God that one of the most flagrant price violators of each state was hanged in gibbets, upon a gallows tree five times as high as the one prepared for Haman. No punishment is too great for the man who can build his greatness upon his country's ruin.

George Washington, first President of the United States of America.

What Is More, It Can't

Thirty-four religious and educational leaders have denounced the atomic bomb an "an atrocity of a new magnitude." . . . Technological progress cannot be halted. The clerics denounced the first efforts to create natural substances by artificial chemical processes as blasphemous interference with the Divine Order of the universe. . . . The atomic bomb is technology's latest, greatest and most terrifying challenge to . . . a culture that has not yet adjusted itself to Watt's invention of the steam engine.

Extract from an editorial in the *Chicago Daily News*, August 22, 1945.

I Only Work There

The social effectiveness of the engineer today is almost entirely in-

direct. He develops, in general, what his employer wants, whether that employer is a government or a corporation. He has little concern whether his products are utilized for general welfare or for violent destruction. To politicians he delegates the responsibility for their use; and he rarely subjects their decisions to the same critical analysis to which he puts the data of his engineering experiments. . . .

Perhaps after all the world wouldn't be any better if the scientific point of view were more universally adopted and adhered to.

Well, then, there is a curious coincidence of the most productive state technology has ever reached—that of the last five decades—and the two most disastrous wars of history, not to mention one of the most widespread industrial depressions. Statesmen and lawyers, clerics and philosophers, businessman and ignorant populaces have had a chance, practically free from interference by engineers and scientists to show what they could do. It may be time to give the engineer a chance. But it won't be given to him unless he reaches for it.

John Mills, research engineer and author, in the introduction to his book 'The Engineer In Society,' published by D. Van Nostrand Co., Inc. (as quoted by the *Sci-en-Tech News*, May, 1946).

The Finger Points

Catholicism (Roman) is the Fascist form of Christianity. The Catholic hierarchy rests fully and securely on the leadership principle with an infallible Pope in supreme command for a life-time.

Count Kalergi-Coudenove, an ardent Roman Catholic, in his book 'Crusade for Pan-Europe,' p. 173 (as quoted by *The Converted Catholic*, January, 1946).

So Wags the World

Fascism and Anti-Fascism

By Research Staff, Great Lakes Technocrat

North America

United States

IT IS charged by official sources in the U. S. Military Government in Germany that there are still about 1,000,000 former Nazi party members in the American zone who have not been screened through an investigative process. Russell A. Nixon, former official of AMG, told Congress that the program of de-nazification was being sabotaged by the American Staff charged with enforcing it, because they did not believe in it. Nixon named Joe Starnes of Alabama, a Colonel with the Army of Occupation, as being prominent in discouraging the de-nazification program. Starnes is a former Congressman who was removed from public life by his constituency in 1944. When active in Congress he was vice-chairman of the

notorious Dies Committee of the House.

Dr. Farrington Daniels, Director of the University of Chicago Metallurgical Laboratory, announced early in May that scientists at the laboratory had completed plans for producing power from atomic reactions. 'We have reached the blueprint stage and soon we will have a turbine spinning on power supplied from a small pile of uranium,' he said. The blueprints were sent to Oak Ridge, Tennessee, where the first power plant is being built. Dr. Daniels stated that the cost of fuel in producing electric power now averages only 20 percent of total costs. Consequently, even if atomic energy becomes cheap, the overall savings would not be great.

Europe

Spain

Fernando De Los Rios, representative of the exiled Republican government of Spain, has a map showing the disposition of Franco's armed forces along the French border. It gives detailed information on the location of over 400,000 Spanish, German and African troops and the Spanish Foreign Legion. The map was compiled by the underground, resistance forces in Spain.

Between the Atlantic coast and the Mediterranean the fascist dictator has over 400,000 fully armed and equip-

ped men. They comprise 29 infantry divisions, 32 regiments of artillery, some tank battalions, units of motorized cavalry, a number of regiments of engineers and 3 air force formations. Included are 40,000 members of the Wehrmacht and several thousand French fascist militiamen. They are spread along 600 kilometers of frontier to a depth of 100 kilometers.

In addition there are units of the German Gestapo in Barcelona and the German security service (SS) installed in other parts of the country. The Falangist espionage service is under

the direction of Germans. De Los Rios plans to put this information before the UN Security Council.

It has been revealed by foreign correspondents that Spain is the haven for scores of key Nazi scientists and technicians who are working on atomic bombs and other war weapons. In April, Poland formally asked the United Nations to intervene in Spain on the ground that Spanish fascism is a world menace. Nothing has been done, except talk about it, up-to-date. *Scotland*

The TVA idea is taking root in the highlands of Scotland. Plans to harness its untapped hydro-electric resources to provide power for farms, homes and industry are beginning to get under way. The North of Scotland, Hydroelectric Board is pressing the Government for priorities for two

systems. These are at Loch Sloy in Dumbartonshire and at Pitlochry in Perthshire. German prisoners of war and some Polish soldiers are at work building roads for the Loch Sloy project.

The two projects are expected to be in operation inside of three years. Four other projects are in the preliminary stages. These are at Loch Fannich in the County of Ross and Cromarty, at Cowal, on Skye Island, and in the Orkneys. The scheme calls for a grid that will distribute electric power all over North Scotland. The Hydroelectric Board is offering the enticement of exceptionally cheap power to attract industrial development. Lord Airlie, Chairman of the Board, states that other great water-power resources in the northern counties are still to be worked on.

'Thunders of Silence'

'Domestic consumers in TVA now use an average of 1,754 kilowatt-hours of current a year, as compared with the national average of 1,186. In 1945 TVA supplied 1/10 of all power used by war industries; it is the largest single integrated power system in the U.S. The War Department has revealed that "The ability of the TVA to supply abundant electric power was the major factor in locating one of the largest atomic energy plants at Oak Ridge, Tenn." Wartime industrial expansion greatly accelerated development in TVA; hydro-electric capacity in 1945 was 127% greater than it was in 1940.'—*Chicago Sun*, January 5, 1946.

T. V. A. delivers 12,000,000,000 kilowatts of power annually to 520,000 consumers, at an average cost of 1.85 cents per kilowatt-hour.

Ontario Hydro delivers 12,500,000,000 kilowatt-hours annually to 723,000 customers, at an average cost of 1.31 cents.

...ne industrial rate for energy from the Bonneville-Grand Coulee system is now 2 mills a kilowatt-hour.—*New York Times*, April 14, 1946.

The energy released by a single atom undergoing a radioactive change is about one million times as great as the energy released by a single atom undergoing chemical change.—Dr. James Franck of the University of Chicago in a radio talk December 16, 1945.

A male nurse in a mental hospital noticed a patient with his ear close to the wall, listening intently. The patient held up one finger as a warning to be very quiet, then beckoned him over and said: 'You listen here.'

The nurse put his ear to the wall and listened for some time, then turned to the patient and said: 'I don't hear anything.'

'No,' said the patient, 'and it's been like that all day.'

In the Question Box

Educate—Orchestrate—Operate

By Speakers Division, 8741-1

Engineers know matter and energy, but can they handle social problems? E.A.M.

The probabilities are that they can, provided they receive the same type of scientific training about social problems as they do about technical problems. When an engineer attempts to 'handle' social problems by political and other Price System methods, he usually makes as big an ass out of himself as anybody else. The reason is that he's using the wrong tools. One can't build a bridge, a skyscraper or a great industrial plant by juggling political and philosophical opinions. The job requires the application of scientific principles to the physical factors involved.

Neither can one work out the solution to social problems by juggling opinions; politicians, moralists and philosophers to the contrary notwithstanding. Their record belies their words. What social problems have they ever solved? The muddle-headed method of social control characteristic of the Price System for thousands of years was compulsory in the past because no better method could be devised under the ever-existing conditions of natural scarcity and lack of scientific knowledge. However, today, in North America, Price System methods are not only not compulsory, they are not even socially tolerable anymore.

This is because the nature of social problems has changed. In the past the major social problem was how to effect an equitable distribution of a natural scarcity. This is a political-

philosophical problem. The impact of technology and science has changed this to a technical problem of how to distribute an abundance. If this is correct, then all Price System attempts to solve social problems in North America are condemned in advance to futility. Since the problem is now a technological problem, it requires technological methods. Any alert, intelligent citizen can understand this. One does not have to be an engineer.

All this talk about turning over social controls to engineers is beside the point. It indicates, on one hand, a red herring thrown out by the status quo to scare people and muddy up the waters of social change. On the other hand, it indicates the possession of a 'fuehrer complex' on the part of those who expect the engineers to lead them to the Promised Land. A great many people have a desire to escape from the obligations of citizenship by foisting the responsibility upon one group. That's a good way to get sold out.

Technocracy has never advocated turning over social control to engineers, scientists or technologists. Minority rule is not the answer to America's problems. Technocracy stands for the adoption of technological PRINCIPLES of social control within the framework of a scientific design dictated by physical laws. Read and ponder that sentence well. It means that WE, THE PEOPLE, must adopt a BLUEPRINT OF SOCIAL OPERATIONS when the time arrives that the Price System can no longer function. Another point should be added here. Technocracy

has never advocated social change. Instead, it is PREPARING for that social change which is inevitable in North America.

Whether we will move forward into a New America of Abundance, Distribution, Security and Equal Opportunity, or backward into social fascism depends upon how well we understand the problem. Under the Price System most scientists and engineers are as muddle-headed and ignorant about how to solve social problems as politicians and business men in general. This does not detract from their great achievements in their own fields. Rather, it points to the fact that the methods of science must be extended from the purely technical field to cover the entire social field.

Because scientists, engineers, and technologists have been trained in the scientific method, they bear a great responsibility for its application to the social field. Also, because of their training, it is likely they can be of great service to North America when its darkest days arrive. It is for this reason alone that engineers, scientists, technicians, etc., occupy such an important place in the Body of Thought of Technocracy and not because they have been anointed by some special providence to pull our chestnuts out of the fire for us.

As you say, engineers know matter

and energy. Consequently, they can 'handle' social problems because in this industrial age these are primarily problems of matter and energy. However, it is not the engineer (in himself) that America needs. It is the *engineering method*. If you can stop thinking in terms of human struggles for power and begin thinking in terms of quantitative analysis, you will understand. One thing is certain; Price System methods and Scientific Methods are opposite to each other. We can't use Price System methods to install the New America. It has to be done with Scientific Methods. Fortunately, scientists, engineers, etc., have no monopoly on these methods. Most any one can use them.

Technocracy is the social aspect of Science. It has analyzed the Price System and synthesized a far better social entirety to replace it when it collapses. We suggest that you investigate Technocracy. Then, join the Organization, read its literature, and go through the Study Course. You will see that the great American problem is not one for scientists, engineers, etc. alone but for all Americans. Don't worry about the engineers. They'll fall in line when the time comes. If we take this as our motto, we cannot fail:

Join Technocracy Now

Under the Head of Progress

From 1850 to 1925, output of U.S. blast furnaces increased 7,000 per cent, while employment increased 50 per cent.—U.S. Bureau of Labor Statistics.

'Only one American in one thousand is really well fed in the sense that no further improvement could be made in his physical condition by changes in his diet.'—From *Your Red Cross*, a booklet

put out by the Chicago chapter of the American Red Cross.

'Half the men in our scientific laboratories still dream of patents and secret processes. We live today largely in the age of alchemists, for all our sneers at their memory. The "business man" of today still thinks of research as a sort of alchemy.'—H. G. Wells, in *Outline of History*, page 731.

A Last Salute

Following a long illness, Flora B. Crowther, the first member and Organizer of Technocracy Inc. in Ashtabula, Ohio, died on Saturday, April 27, 1946.

Attending the funeral services were members of the family and numerous friends. A delegation of Technocrats from Section 15, R. D. 8141, Cleveland, was present to pay their respects. The Director of 8141-15 made a few pertinent Technocratic remarks as a part of the ceremony. All the seven pall bearers were Technocrats in Gray.

Flora Crowther will be remembered in the New America for which she worked and taught.

She did her part well. She was a Functional Technocrat; which means that she lived up to the very highest concept of American citizenship. This is a great record to take along when one goes over the Great Divide and a great legacy to leave behind for those who still struggle to solve America's social dilemma.

Some Technocracy Section addresses in Great Lakes area

- 8040- 2—Box 356, Ambridge, Pa.
- 8040- 3—340 Brighton Ave., Rochester, Pa.
- 8041- 1—1613 East 51st St., Ashtabula, Ohio.
- 8141- 3—39 E. Market St., Akron, O.
- 8141- 4—2237 Front St., Cuyahoga Falls, Ohio.
- 8141- 7—P. O. Box 270, Barberton, O.
- 8141-14—P. O. Box 553, Kent, Ohio.
- 8141-15—10537 St. Claire Ave., Cleveland 8, Ohio.
- 8240- 1—207 N. Washington St., Galion, Ohio.
- R. D. 8242—c/o John Reynolds, St. Clair, R. No. 2, Mich.
- 8341- 1—1430 Adams St., Toledo 2, Ohio.
- 8342- 2—112 N. Tasmania, Pontiac, Mich.
- 8343- 1—6717 N. Saginaw St., Flint, 5, Mich.
- 8439- 1—P. O. Box 81, Station A, Dayton, Ohio.
- 8741- 1—3178 N. Clark St., Chicago 14, Ill.
- 8743- 1—3546 N. Green Bay Ave., Milwaukee 12, Wis.
- 8844- 1—620 S. Broadway, Green Bay, Wis.
- 8844- 2—1011 W. College Ave., Appleton, Wis.
- 8844- 3—135 Van St., Neenah, Wis.
- 9038- 1—4518 Delmar Blvd., St. Louis, Mo.
- R. D. 9041—2428 13th Ave., Rock Island, Ill.
- R. D. 9140—18 N. 5th St., Keokuk, Iowa.
- 9344- 1—30 N. 10th St., Minneapolis 3, Minn.
- R. D. 9344—527 Wabasha St., St. Paul 2, Minn.
- 9439- 1—P. O. Box 209, Kansas City 17, Kan.
- 9648- 1—P.O. Box 178, Warren, Minn.
- R. D. 9737—4442 Bayley, Wichita 9, Kan.

TECHNOCRACY

NORTH AMERICA'S ONLY SOCIAL DYNAMIC

WHAT?

★ Technocracy is the only North American social movement with a North American program which has become widespread on this continent. It has no affiliation with any other organization, group or association either in North America or elsewhere.

★ The basic unit of Technocracy is the chartered Section consisting of a minimum of 25 members and running up to several hundred.

★ It is not a commercial organization or a political party; it has no financial subsidy or endowment and has no debts. Technocracy is supported entirely by the dues and donations of its own members. The widespread membership activities of Technocracy are performed voluntarily; no royalties, commissions or bonuses are paid, and only a small full-time staff receives subsistence allowances. The annual dues are \$6.00 which are paid by the member to his local Section.

★ Members wear the chromium and vermillion insignia of Technocracy—the Monad, an ancient generic symbol signifying balance.

WHERE?

★ There are units and members of Technocracy in almost every State in the U. S. and in all Provinces in Canada, and in addition there are members in Alaska, Hawaii, Panama, Puerto Rico and in numerous other places with the Armed Forces.

★ Members of Technocracy are glad to travel many miles to discuss Technocracy's Victory Program with any interested people and Continental Headquarters will be pleased to inform anyone of the location of the nearest Technocracy unit.

WHEN?

★ Technocracy originated in the winter of 1918-1919 when Howard Scott formed a group of scientists, engineers and economists that became known in 1920 as the Technical Alliance—a research organization. In 1933 it was incorporated under the laws of the State of New York as a non-profit, non-political, non-sectarian membership organization. In 1934, Howard Scott, Director-in-Chief, made his first Continental lecture tour which laid the foundations of the present nation-wide membership organization. Since 1934 Technocracy has grown steadily without any spectacular spurts, revivals, collapses or rebirths. This is in spite of the fact that the press has generally 'held the lid' on Technocracy, until early in 1942 when it made the tremendous 'discovery' that Technocracy had been reborn suddenly full-fledged with all its members, headquarters, etc., in full swing!

WHO?

★ Technocracy was built in North America by North Americans. It is composed of North American citizens of all walks of life, Technocracy's membership is a composite of all the occupations, economic levels, races and religions which make up this continent. Membership is open only to North American citizens. Aliens, Asiatics and politicians are not eligible. (By politicians is meant those holding elective political office or active office in any political party.)

★ Doctor, lawyer, storekeeper, farmer, mechanic, teacher, preacher or housewife—as long as you are a patriotic North American—you are welcome in Technocracy.

**Great Lakes Technocrat,
843 Belmont Avenue,
Chicago 14, Illinois**

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"Funny—they just go ahead and build!"